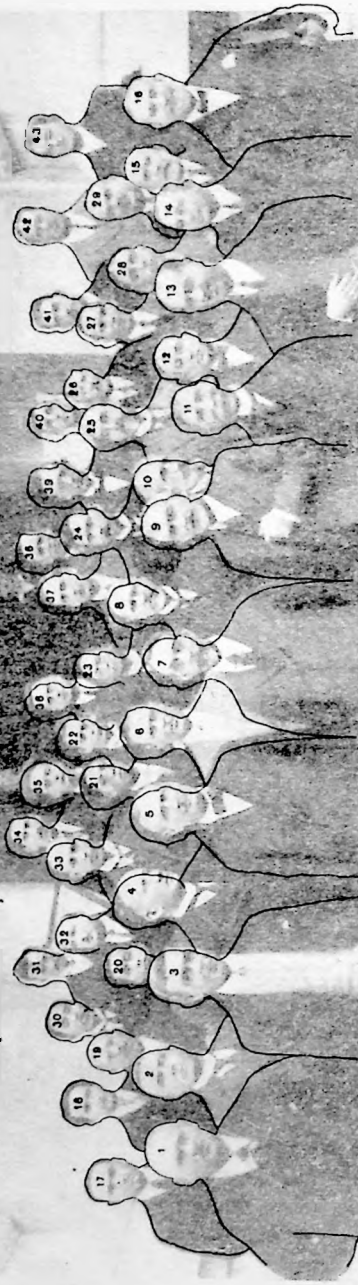


SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE MONACO 1926 DEUXIÈME CONFERENCE HYDROGRAPHIQUE INTERNATIONALE MONACO 1926



1. Captain BJÖRSET (Norway).
2. Captain LUMES (Netherlands).
3. Captain DOUGLAS (Great Britain).
4. Commander RENIUS (Sweden).
5. Rear Admiral NIBLACK, Director I.H.B.
6. Captain FABLET (Argentina).
7. Captain CROSLY U.S.A. Vice-President of the Conference.
8. Captain H.O. RAVN (Denmark).
9. Commander SPICER-SIMON, Secretary-General of the I.H.B. and of the Conference.
10. Lieutenant Hydrographe en Chef DE VANSSAY (France).
11. Lieutenant Hydrographe Général FICHOT (France).
12. Captain DE OLIVEIRA SAMPAIO (Brazil).
13. Commander BALDI (Italy).
14. Captain SCHWEPPE (Germany).
15. Captain HERRERO Y GARCIA (Spain).
16. Captain CABALLERO Y LASTRES (Spain).
17. Lieutenant BENCKER, Assistant I.H.B.
18. M. MARTIN, I.H.B.
19. Commander BENTZ (Spain).
20. Commander SHAO (China).
21. Lieutenant Commander CHEN (China).
22. Lieutenant Commander COLEMAN (Greece).
23. Captain KAWAMURA (Japan).
24. Captain KROUSSANDEAU (France).
25. Captain HOOTYKAS (Greece).
26. Monsieur F. BUTAVAND (Netherlands).
27. Lieutenant Commander MONTE (Greece).
28. Commander BASIKOTZIKAS (Greece).
29. Lieutenant Commander LOPES (Portugal).
30. Captain HORT (Japan).
31. Lieutenant ALBERT, Assistant I.H.B.
32. Professor TENANI (Italy).
33. Commander BOUVENG (Sweden).
- 34, 35, 36. Interpreters.
37. Commander HASELFOOT (Great Britain).
38. Commander DENISON, Assistant I.H.B.
39. Commander WARBURG (Great Britain).
40. Commander BRANDON (Great Britain).
41. MAMMOUD BEY RAYMAN (Egypt).
42. Mr. RICHARDS (Egypt).
43. Lieutenant Commander CHORIANISCH (Yugoslavia).

1. Capitaine de Vaisseau BJÖRSET (Norvège).
2. Capitaine de Vaisseau LUMES (Pays-Bas).
3. Capitaine de Vaisseau DOUGLAS (Grande-Bretagne).
4. Commandeur RENIUS (Suède).
5. Capitaine-Amiral NIBLACK, Directeur I.H.B.
6. Capitaine de Vaisseau FABLET (Argentine).
7. Capitaine de Vaisseau CROSLY (Etats-Unis).
8. Capitaine de Vaisseau H.O. RAVN (Danemark).
9. Capitaine de Frégate SPICER-SIMON, Secrétaire Général de l'I.H.B. et de la Conférence.
10. Ingénieur Hydrographe en Chef DE VANSSAY (France).
11. Lieutenant Hydrographe Général FICHOT (France).
12. Capitaine de Vaisseau DE OLIVEIRA SAMPAIO (Brésil).
13. Capitaine de Frégate BALDI (Italie).
14. Capitaine de Vaisseau SCHWEPPE (Allemagne).
15. Capitaine de Vaisseau HERRERO Y GARCIA (Espagne).
16. Capitaine de Vaisseau CABALLERO Y LASTRES (Espagne).
17. Lieutenant de Vaisseau BENCKER, Adjoint I.H.B.
18. M. MARTIN, I.H.B.
19. Capitaine de Frégate BENTZ (Espagne).
20. Commandeur SHAO (Chine).
21. Capitaine de Corvette CHEN (Chine).
22. Capitaine de Corvette COLEMAN (Grèce).
23. Capitaine de Vaisseau KAWAMURA (Japon).
24. Capitaine de Frégate KROUSSANDEAU (France).
25. Capitaine de Vaisseau HOOTYKAS (Grèce).
26. Monsieur F. BUTAVAND (Pays-Bas).
27. Capitaine de Corvette MONTE (Grèce).
28. Capitaine de Frégate BASIKOTZIKAS (Grèce).
29. Capitaine de Vaisseau LOPES (Portugal).
30. Capitaine de Vaisseau HORT (Japon).
31. Lieutenant de Vaisseau ALBERT, Adjoint I.H.B.
32. Professeur TENANI (Italie).
33. Capitaine de Frégate BOUVENG (Suède).
- 34-35-36. Interprètes.
37. Capitaine de Frégate HASELFOOT (Grande-Bretagne).
38. Capitaine de Frégate DENISON, Adjoint I.H.B.
39. Capitaine de Frégate WARBURG (Grande-Bretagne).
40. Capitaine de Frégate BRANDON (Grande-Bretagne).
41. MAMMOUD BEY RAYMAN (Egypte).
42. Monsieur RICHARDS (Egypte).
43. Capitaine de Corvette CHORIANISCH (Yougoslavie).

**INTERNATIONAL HYDROGRAPHIC
BUREAU**



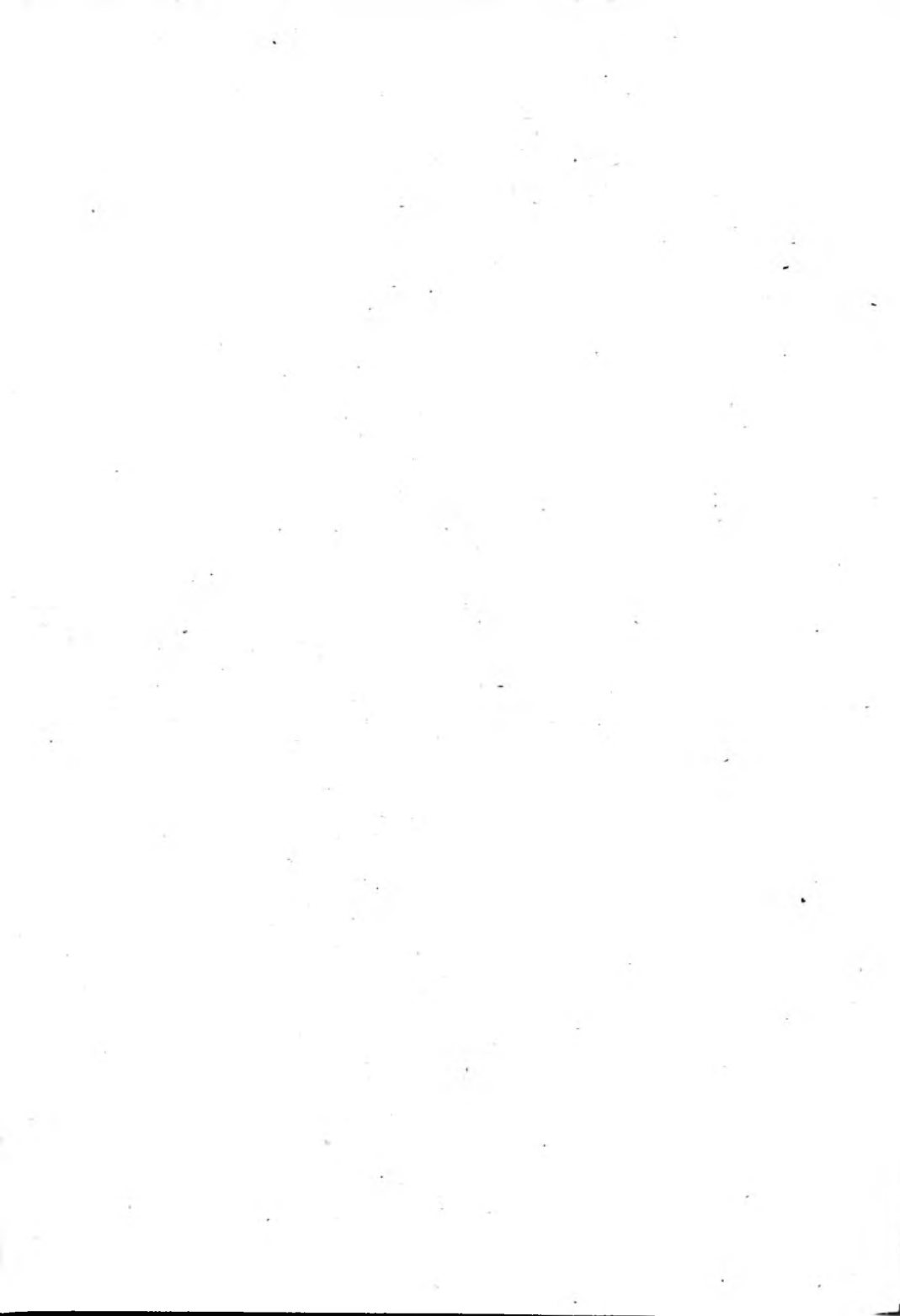
**REPORT OF THE PROCEEDINGS
OF THE SECOND INTERNATIONAL
HYDROGRAPHIC CONFERENCE.**

MONACO
(PRINCIPALITY)



(26 OCTOBER — 10 NOVEMBER 1926)

IMPRIMERIE ROBAUDY — CANNES
24, Rue Hoche, 24



REPORT OF THE PROCEEDINGS
OF THE SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE
MONACO 1926

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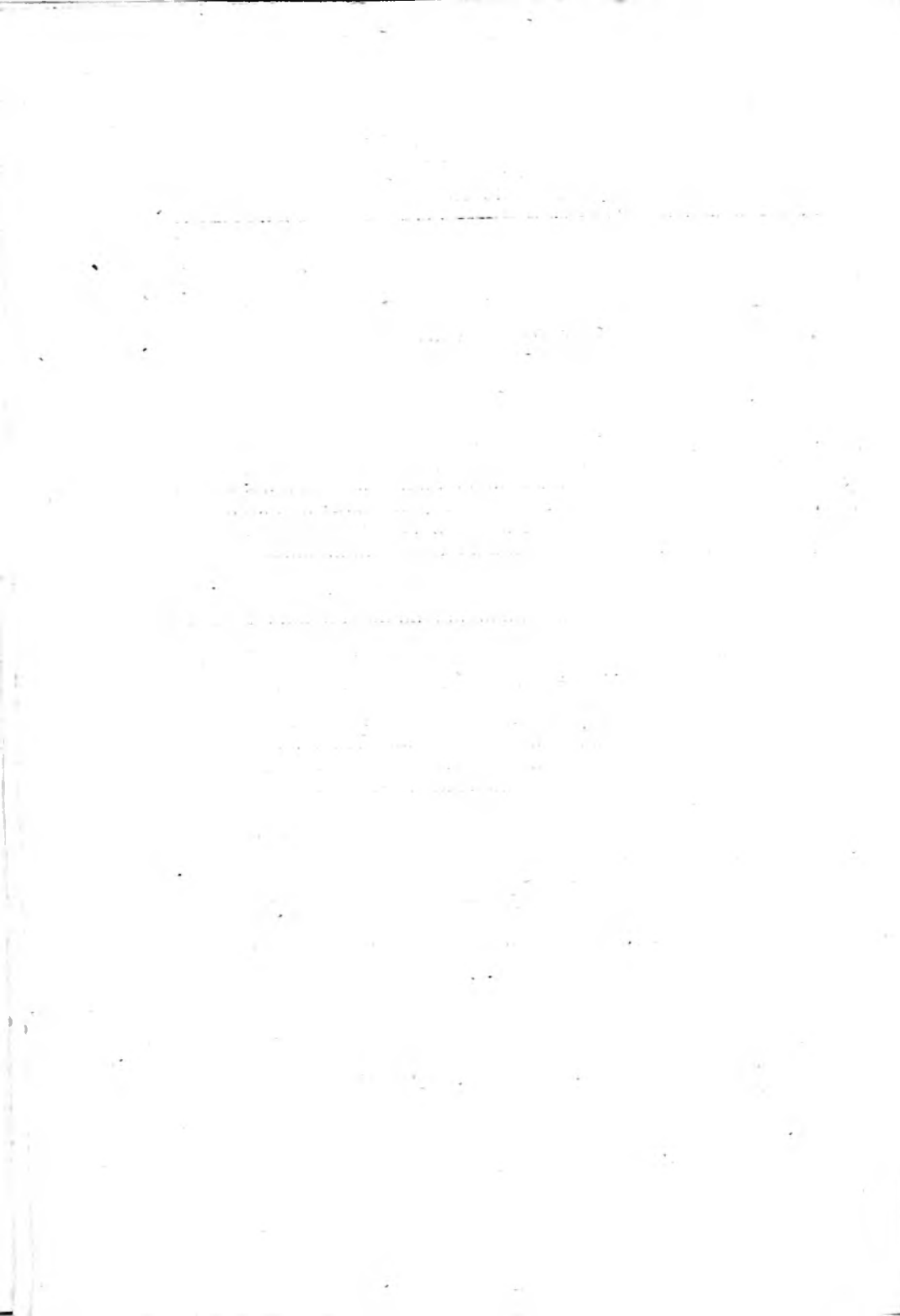
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PREFACE

THE SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE

It is laid down in the Statutes of the International Hydrographic Bureau that an International Hydrographic Conference shall be held, "as a general rule, every five years commencing from the date of the establishment of the Bureau". As this occurred on 21st June 1921, the conference should have been held during the summer of 1926 but that period of the year is not suitable for climatic reasons and on account of the limited accommodation available for visitors in the Principality of Monaco, where the Statutes state that the Conference shall be held, "unless advantageous invitations to hold them elsewhere are received."

The Directing Committee of the Bureau decided, therefore, that it would recommend that the Conference should be held in the autumn when the hotels have begun to open for the winter season and, as a rule, the climatic conditions are better. It was suggested that the end of October would be suitable and, the States Members having acquiesced, Tuesday 26th October was selected as the date of the Opening Meeting and H.S.H. Prince PIERRE OF MONACO (*) kindly consented to open the Conference. Unfortunately, the climatic conditions were unfavorable, for, during the fortnight when the Conference was held, rain fell very frequently.

Of course many questions arise during the period between Conferences and it is the duty of the Directing Committee to study these and propose solutions. Such proposed solutions are communicated to the Members by Circular-Letter and in many cases, the majority of the Members having so voted, they have been adopted as proposed or, as the result of correspondence, they have been modified and adopted by vote after such modification. It is obvious, therefore, that any subject which lends itself to general acceptance is disposed of before the Conference meets and that those which remain to be discussed are necessarily controversial questions. This fact tends to lengthen the discussions and makes it the more necessary that the Delegates should be technical experts and that they should be given comparatively wide discretionary powers.

The offices of the Bureau do not contain a hall large enough to accommodate all the Delegates, interpreters, stenographers and other necessary personnel, and therefore the Directing Committee hired the Lecture Hall of the well known Oceanographic Museum which was established on the Rock of Monaco by the late Prince ALBERT I. The Plenary Sessions and some of the

* Consort of the Hereditary Princess of Monaco.

Committee Meetings were held in this Hall, which is large enough to allow two, and sometimes even three, Committees to meet simultaneously. Other Committee Meetings were held in the Library and in the Committee Room of the Bureau.

At the opening Meeting, which took place at 10.30 a.m. on 26th October 1926 and which was attended by H.S.H. the HEREDITARY PRINCESS OF MONACO, the Members of the MONEGASQUE GOVERNMENT, the CONSULAR REPRESENTATIVES of the States which had sent Delegates, and by prominent persons of many nationalities who were living in the vicinity of, or in the Principality, the President of the Directing Committee made an interesting speech welcoming the Delegates and briefly outlining the history of the Bureau and of Hydrography. Then, having thanked Prince PIERRE for kindly consenting to take the Conference under his patronage, he invited him to open its proceedings. Prince PIERRE, in his turn welcomed the Delegates, referred in moving terms to the death of the late President of the Directing Committee, Admiral Sir John PARRY, spoke of the work of the League of Nations, to which the Bureau is affiliated, and finally declared the Conference to be open.

The first Plenary Session was held in the afternoon of the same day and thereat Rear-Admiral J. M. PHAFF, President of the Directing Committee of the Bureau, and Captain W. S. CROSLY, Delegate of the United States of America, were elected respectively President and Vice-President of the Conference and Commander G. B. SPICER-SIMSON, Secretary-General of the Bureau was elected as Secretary-General. Owing to an unfortunate illness, Rear Admiral PHAFF was unable to attend any but the earlier meetings and thus Captain CROSLY acted as President for the greater part of the Conference.

Six Committees were formed to examine and report on the following subjects :

- I. Statutes.
- II. Finance.
- III. Work of the Bureau.
- IV. Charts & Technical Documents.
- V. Tides.
- VI. Eligibility of Candidates for the posts of Director and Secretary-General of the Bureau.

The reports of these Committees, with the exception of that of the Committee on Charts and Technical Documents, were submitted to the Plenary Session, which adopted, modified or rejected the recommendations of the Committees. The Committee on Charts and Technical Documents, having to examine a large number of questions and proposals, did not complete its work until nearly the closing date of the Conference and thus was unable to present a definite report before the Closing Session. As, however, every State interested had been represented on the Committee, it was decided that this report should be drawn up by the Chairman of the Committee and distributed to the Hydrographic Offices by the Bureau. This has now been done.

It should be noted that, on *technical* subjects, each State which sent a Delegation to the Conference had one vote, but that on *administrative* subjects the States Members of the Bureau only were allowed to vote, one vote to each.

The Committees on Statutes, Finance and Eligibility of Candidates dealt entirely with administrative subjects; that on the Work of the Bureau was partly administrative and partly technical, and the other two Committees dealt with technical subjects only.

The following were represented at the Conference:—

<i>STATES MEMBERS OF THE BUREAU.</i>		<i>Number of Delegates</i>
ARGENTINE		2
BRAZIL		1
BRITISH EMPIRE (UNITED KINGDOM & AUSTRALIA)		4
CHILE		1
CHINA		2
DENMARK		2
EGYPT		2
FRANCE		3
GERMANY		3
GREECE		2
ITALY		2
JAPAN		2
MONACO		2
NETHERLANDS		2
NORWAY		1
PERU		1
POLAND		1
PORTUGAL		1
SPAIN		3
SWEDEN		2
UNITED STATES OF AMERICA		1
<i>STATES NOT MEMBERS OF THE BUREAU.</i>		
BRITISH INDIA		1
SERB, CROAT, SLOVENE KINGDOM		1

Total 23 States.

42 Delegates

The only State Member of the Bureau which was not represented at the Conference was SIAM.

For the discussion in Committee and in Plenary Session the reader is referred to the "Report of Proceedings of the Second International Hydrographic Conference".

The Plenary Sessions lasted 26 1/2 hours and the Committees sat (some of them simultaneously) for a total of 81 1/2 hours, viz.

Committee on Charts and Technical Documents.....	30 hours
" " Statutes	27 1/4
" " Work of the Bureau	8 1/4
" " Finance	7 1/4
" " Tides	6
" " Eligibility of Candidates.....	2 3/4

The principal Resolutions made by the Conference are given on page 51 *et seq.*

According to the Statutes of the Bureau, elections are to be held during the Conference for the appointment of the Members of the Directing Committee and of the Secretary-General for the ensuing five years. These elections were held on 6th November and resulted as follows :

DIRECTING COMMITTEE

Rear-Admiral A. P. NIBLACK D. S. M. (United States of America)	President
Monsieur Pierre DE VANSAY DE BLAVOUS Ingénieur Hydrographe Général (France)	Member
Captain L. TONTA (Italy)	Member

SECRETARY-GENERAL

Commander G. SPICER-SIMSON, D. S. O. (Great Britain).

During the evening of the opening day of the Conference, Their Serene Highnesses the HEREDITARY PRINCESS and Prince PIERRE OF MONACO received the Delegates at the Palace.

By the kindness of the French Government a French Surveying Vessel, the *Beautemps-Beaupré*, and her tender, the *Alidade*, were present in the harbour of Monaco during the first three days of the Conference. The Captains and Officers of these ships gave a reception in honour of the Delegates to whom the Recording Echo-Sounding apparatus installed on board was exhibited and explained.

On 28th October, H. E. the Minister of State entertained the Delegates at lunch and in the evening a gala performance was given, in honour of the Delegates, at the Monte Carlo theatre.

The Mayor and the Municipal Council of Monaco gave a lunch, at the Hôtel de Paris, to the Delegates on 30th October.

On Sunday 31st October, the Bureau organised an excursion to the Gorges du Loup to which the Delegates were invited to bring the members of their families who had accompanied them to Monaco. The excursion included lunch at Grasse and a visit to one of the perfume factories.

Monday, 1st November being All Saints Day and a legal holiday, no sessions were held.

The Electric Submerged Log Company having installed a log in a motor-boat, this boat was placed at the disposal of the Delegates, for the purpose of testing the Log, during the remainder of the Conference.

The Delegates and the members of their families were kindly entertained at tea by Mr. and Mrs. HARRISON-BENNETT, at the Chateau de la Vigie, on 1st November.

Another excursion was organised on Sunday 7th November. On this occasion, St. Raphael was visited and lunch was taken at Valescure. In the evening the Municipality of Monaco gave a firework display in honour of the Delegates.

On Wednesday 10th November the Delegates invited the Monegasque Authorities, the staff of the Bureau and all who had entertained them during their stay in Monaco, to a thé-dansant at the Hôtel de Paris.

G. S. S.

OPENING SPEECH

By Admiral PHAWF

President of the Directing Committee.

(translated from the French original)

Your Serene Highnesses,
Ladies and Gentlemen,

When the International Hydrographic Conference, at which about a score of nations attended, decided unanimously in 1919 on the creation of an International Hydrographic Bureau and appointed a Committee consisting of the Heads of the Delegations of the United States of America, France and Great Britain, to draw up an organisation for this Bureau, the seat thereof was far from being decided.

Many delegates, being of opinion that the proximity of a great centre of Hydrographic activity might be advantageous to the Bureau, had considered its establishment in London, but others, and amongst them the President of the Conference, Admiral PARRY, fearing that this proximity might infringe on the independence of the Bureau, had opposed both this idea and the choice of any place near to a great Hydrographic centre.

It was only at the time when a draft of the Statutes was being elaborated that the seat of the Bureau was taken into serious consideration, and those who were charged with this elaboration were of the opinion that the choice should fall on a place in a neutral country. Besides, it was desirable that the Bureau should be established in Europe for, of the 21 States Members, twelve were European; further, that it should be in a more or less central country which, if possible, enjoyed a moderate climate.

The number of such countries was not great and thus the choice was much restricted. Happily, on the coast of the Mediterranean, there was an historical Principality, small in extent but great in the scientific renown of its reigning Prince, whose high attainments in the sphere of Hydrography were universally recognised, and who had founded in his Principality a Museum whose support might be useful to the Bureau.

As the attributes of this Principality, no less renowned for its climate than for its marvellous position, satisfied the required conditions, the Organising Committee decided to pray His Serene Highness Prince ALBERT of Monaco to permit the Bureau to be established in this Principality.

Not only was this permission graciously given, but H. S. H. deigned to take an immediate interest in the new organisation and was kind enough to give the Committee his full support, which kindness was very highly appreciated.

The elections were then undertaken, but, alas! the death of Monsieur RENAUD, late chief of the French Hydrographic Service, supervened before the elections were completed. This was an irreparable loss for the Bureau, for Monsieur RENAUD had been the Representative of France in London, where he proposed the establishment of the Bureau and had supported the proposal with all the force of his generally recognised high competence. He died without having even the legitimate satisfaction of being one of the first Directors.

A proposal was made immediately, to the French Government, to suspend the elections until France could put forward another candidate, but the then Chief of the French Hydrographic Service did not think it convenient to accept this proposal and thus elections resulted in the appointment of the British, Netherlands and Norwegian candidates to the Directorships. They appointed, as the Secretary, Commander SPICER-SMITHSON.

The second floor of the building which had been the Hotel Beausite, in the Condamine, was then taken on a lease, the necessary modifications to the interior were made and, on 12th September 1921, the offices of the Bureau were transferred thereto, they having been in another hotel up to that date.

What then is the object of this Bureau and why was it established?

Articles 6 and 9(a) of the Statutes answer these questions.

The principal subjects with which these Articles deal are the coordination of the Hydrographic work of the Services of the States Members and efforts to obtain uniformity, as far as possible, in Hydrographic documents. Until the Conference of 1919, each Hydrographic Service drew up its charts, sailing directions, etc... by the method which was most convenient to the subject and to the exigencies of its own requirements; there was no collaboration. These documents, being drawn up in the national language, were useless to those who were not acquainted with it, and the charts, which are not based on clear language but on symbols, presented no less great difficulties, for varying symbols and different systems of abbreviations were used.

The difference in the units used for measuring depths was inconvenient, it is true, but this difficulty can be overcome by means of a conversion table.

It followed that, to sail the seas, the original documents of the various countries were not used; for voyages to foreign countries, documents issued by a nation which covered the whole world in its publications, for preference the British documents, were chosen; thus the navigator was deliberately deprived of much original information and had to content himself with copies which, without exception, were more or less behind the times.

In a time-worn and completely forgotten pamphlet which was published in Washington, in 1884, Mr. E. R. KNORR, the Chief Draughtsman of a Hydrographic surveying expedition of the United States of America, had already proposed the issue of original charts and he gave figures showing the enormous economies which could be effected if all the nations which publish charts of the same coast or port were to come to an understanding as to the reproduction of these charts on a common basis. This far-seeing man pleaded also for a permanent international Hydrographic institution, giving numerous examples showing the necessity for its existence, and he states that his proposal to convene an international Conference on the subject succeeded to the extent that two Governments actually came into communication with reference to such convocation.

It required the perspicacity of Monsieur RENAUD to rediscover this same obstacle, which impelled him to write an article on the International Chart which appeared in the French "Annales Hydrographiques" of 1918. Following up this idea, the advantages of an international Conference to discuss the subject came likewise to his mind and, as soon as the support of the British Hydrographer was assured, the first really International Hydrographic Conference, the dream of Mr. KNORR, was conceived.

These two Chiefs, both of them professional men, well aware of the intricacies of the subject, did not belittle the enormous difficulties which they would have to overcome.

Very few nations have interested themselves in navigation until recently. Nearly all people have a secular tradition, and this tradition has entered into their Hydrographic Services where it is carried on by seamen who, owing to their education and their profession, are conservative and very careful in the abandonment of contracted habits which have given satisfactory results over periods of many years.

To attempt to standardise, in as great a measure as is possible, the publications issued by the Offices without raising opposition was, thus, not an easy matter, and the more so in that the

Bureau was not to have any authority whatever over the Hydrographic Offices of its States Members, which were to remain entirely independent.

The first work to be undertaken was that in connection with the questions referred to the Bureau by the London Conference. Then other subjects were taken in hand, and the number of these increased as the Bureau had at its disposal technical Assistants capable of seconding the Directors in their studies and researches.

However, quiet and steady work was denied to the Directors owing to losses from which they were not spared.

First, the death of Prince ALBERT of Monaco, which occurred in June 1922, had to be deplored. The Bureau was profoundly affected and saddened by the death of this Sovereign who had followed with so much interest its creation, establishment and development and who, combined in his person the unique qualities of seaman and statesman, with those of explorer and scientist.

Then, on his return from Cairo, where he had represented the Bureau at a Congress, Admiral PARRY fell seriously ill, in May 1925, and a year later occurred the lamentable death of the first President of the Directing Committee of the Bureau, who had participated with so much authority and vigour in its organisation and in its establishment at Monaco.

As provision had already been made for the calling of a second Hydrographic Conference in the following October, and as the Statutes prescribed that the Directors must retire at the time of this Conference, the Directing Committee decided not to fill the vacancy caused by the loss of one of its members.

In May 1923, Captain MÜLLER expressed the desire to leave the Bureau on account of his failing health. He left on 1st October and was not succeeded until April 1924 by Rear Admiral NIBLACK of the United States of America.

On 1st January 1925 the Bureau saw with regret the withdrawal of one of its States Members. Belgium, the delegates of which State were present at the London Conference and had taken part in the discussion on the establishment of the International Hydrographic Bureau, could not separate itself from a particular interpretation of the Statutes which was not upheld by the other States members, and preferred to withdraw from our Organisation rather than accept their point of view.

On the other hand, however, the Bureau has seen its membership increased in the present year by the adhesion of Poland and Germany.

During the five years of its existence the Bureau has taken an active part in the scientific work of other organisations dealing with subjects allied to Hydrography. It was represented at the Meetings of the Geodetic and Geophysical Union of the International Research Committee at Rome in 1922 and at Madrid in 1924, at the International Geographical Congress at Cairo in 1925, and it has taken part in the Conferences of the Technical Committee of the Communications and Transit commission of the League of Nations at Paris and Monaco in 1925 and at Stockholm in the present year, as well as at the Meteorological Conference of Zurich.

Mention has been made of the existing Hydrographic Services and of their traditions. It is true that these Services, in the form in which we know them to-day, date but from the beginning of the 19th century, for it was at that time only that the instruments used for making triangulations reached such a degree of precision, and seamen had acquired sufficient skill in their use, that the results obtained inspired confidence. But these Services were the successors of others which, in their turn, had had predecessors and, in thus working backwards, the question arises as to which was the first Hydrographic Service and which the first Hydrographic document.

The solution of this problem is tantamount to giving the answer to another question: When did navigation commence? for the need of such document was surely engendered by the requirements of navigation.

The development of nautical documents may be accounted for thus: A captain who had visited unknown localities gave information, orally and under the seal of professional secrecy, to others who were going to those parts, as to observations which he had made and which would be of use to navigation in those waters. Later this information was given in writing and to it were added views of the coast and small sketches of the anchorages in order to make the text more comprehensible; and thus were born the first sailing directions and the first charts. The number of these documents increased as navigation became more frequent and more distant waters were visited; then the documents dealing with the same regions or the same voyage were collated and the sketches developed into primitive forms of charts.

These data, sometimes in but slight agreement as to distances, for the vessels coasted at varying distances from the shore, were copied and constituted the *periplus*, which name was given to such documents by the GREEK navigators.

The invention of printing, about the middle of the 15th century, made the diffusion of the text possible and, about thirty years later, the method of reproducing charts was learnt. But to come back to the primitive charts, traces of which must be found in the earliest antiquity.

Among the wrappings of Egyptian mummies, which it is believed should be dated at least fifteen centuries before the Christian era, there is some linen dyed with indigo and, as this dye

is an exclusive product of the East Indies, it may be concluded that, even at this far date, there was already communication with the Indies.

Now, such communication must, of necessity, be partially by sea and thus it may be affirmed that, at this distant period navigation already existed, and for this nautical documents, primitive though they may have been, must have been used.

The first hint of a map came likewise from Egypt, where a papyrus has been found which represents the parcelling out of the Nubian gold mines, the boundary marks of which were frequently destroyed by the Nile floods. This papyrus has been given the same date as the mummies; there is no doubt that this is the earliest known cadastral map.

These assumed dates, however, may have errors of some centuries. Therefore let a dawn of geography in antiquity be chosen, as a departure, which may be fixed within more narrow limits of time.

The best known geographer of this period is Claudius PROLEMAEUS (Ptolemy), the Alexandrian genius who flourished in the second century of the present era and who embraced, within the limits of his monumental work, astronomy, mathematics, geography, optics and who knows how many other sciences. Above all he was a mathematician and his most celebrated work is the "Almagest" which contains a remarkable treatise on mathematical geography.

Knowledge of this science was already well advanced at this time. The sphericity of the earth was recognised; a globe, which apparently was constructed about two centuries B.C., is referred to, though no globe bearing a date earlier than 1492 has yet been found. Two Greek learned men, ERATOSTHENES (about two centuries B.C.) and POSIDONIUS (about 100 B.C.) had already attempted to calculate the circumference of the earth; the former reached a figure some 16% too high and the latter about the same amount too low, thus the mean of the two would give a remarkably close measure of the length of the degree of latitude and longitude.

The fundamental idea of the geographers of that period was to produce a map of the "Oikumene", that is of the known inhabited world, on meridians and parallels by determining the latitude and longitude of the principal places. But this idea, which was quite sound, was unattainable because, in the first place, the means of determining longitude did not exist and those for obtaining latitude were still very primitive and, in the second place, the defects of plane charts for representing an extensive portion of the earth's surface were not recognised. Beyond the Sun and the Pole Star, there were no means of determining direction and except for the stadium there were no measures of distance; there being no log, distances over the sea had to be estimated from the courses run by rowing galleys or by sailing vessels.

It is not astonishing, therefore, that, in practice, the results obtained by the learned Ptolemy did not come up to expectations; besides, his geographical work, which consists of maps accompanied by descriptions, is the work of a compiler and not of an explorer. He was unfortunate in basing his geographical distances on the dimensions of the Posidonian globe, for hence the differences of latitude and longitude between two places were usually too large by about one sixth. The latitudes of the Straits of Gibraltar, of Rhodes and of the Gulf of Issus, places which were on the same parallel which was believed to be the central parallel of the world, were nearly correct, but the distance from Marseilles to the North coast of Africa, which is really about 6° of latitude was taken as 11° and the Black and Azov Seas were greatly extended so that the northern point of the latter reached nearly the same latitude as the German Baltic coast.

Naturally enough the longitudes were even worse. As the prime meridian, that of the Fortunate Islands was accepted, and these formed a small hypothetical archipelago of which neither the extent nor the exact position were known, but which was assumed to lie two and a half degrees due West of the Holy Promontory, that is of Cape St Vincent. Later this archipelago was identified with the Canary Islands, which had been visited by Greek seamen and which lie, in fact, seven degrees to the West of the Cape; thus Ptolemy's prime meridian was a precursor of that of Ferro. The longitude of Alexandria, the meridian of which served as a secondary meridian, was nearly correct, but the length of the Mediterranean, which is but 42°, was increased to 62°.

All these imperfections gave rise to deformations, but nevertheless the representation of the Great Sea or of the Inland Sea, the name by which the Mediterranean was then known, was not bad, for it was based on known facts.

The same could not be said for the rest of the world; the Ptolemaic representation was, perhaps even for the greater part, based on vague and doubtful reports.

As the western limit of the inhabited world, as quoted earlier, the meridian of the Fortunate Islands had been accepted; the West coast of Africa formed a vast inlet to the Eastward in latitude 10° North and then disappeared to the Southeastward.

The representation of Great Britain left much to be desired; there is no sign of the Scandinavian peninsula and there is shown, to the northward of the German coast, a vast sea in which an island of about the size of Corsica represents Sweden. The parallel of Thule, that is the Orkneys, was considered the extreme northern limit of the world and eastward of the Vistula the land loses itself towards the North.

The East coast of Africa was known as far as Zanzibar; Cape Delgado is mentioned even, and from this point the coast runs to the westward, then, further on, turns towards the Northwest and connects up with the West coast of Africa. The Ptolemaic chart does not extend

beyond the parallel of Cape Guardafui which, however, is pushed well beyond the Equator whereas, in reality, its latitude is about 12° North.

The eastern limit is Cattigara, an entirely imaginary place which cannot be identified. PROLEMY speaks of the 1378 islands of Taprobane, a name which is evidently applied to Ceylon, and this archipelago can be no other than the East Indian Archipelago, for he mentions Jabadiou Island, in which name that of Java is easily recognised, but he exaggerates the longitude of this island by no less than one third of the greatest width of the Pacific. On account of the similarity of its climate, Taprobane is shown in the same latitude as Cape Guardafui, but to the westward of Cape Comorin, and its dimensions are exaggerated to such an extent that it is a question whether the Malay Peninsula and the island of Sumatra have not been confused with India and the island of Ceylon.

Taprobane was of great importance at this period, and for a long time afterwards, in the geography of the East. It was well known and communications had been maintained with it; not only were this island's products highly esteemed but its climate, flora and fauna were known and had even been described.

The ancient geographers always attached special importance to headlands, straits and islands which they considered to be situated on the rim of the world where they were supposed to form the coasts of the Oceans which surrounded it. Taprobane was one of these. Besides the island was considered to be the portal of the world of the Antipodes or Autochtones, which was believed to be separated from the Oikumene by a sea impassable on account of the high temperature and the quantity of seaweed which it contained. Is this perhaps an allusion to the Sargasso Sea, the discovery of which is generally dated as at the opening of the 16th century?

The Ptolemaic map covers three continents, Europe, Lybia and Asia, and the author succeeded in drawing it so scientifically, for those days, that for centuries the imperfection of its data passed unperceived. It was only by the great discoveries at the close of the 15th century, and of the first quarter of the 16th century, that the extent to which it was defective was recognised. Christopher COLEMAN extended the Ptolemaic world westward, Vasco da GAMA and his successors corrected the East, which had already been done to some extent by Marco POLO, and MACELLAN crowned the work by connecting the Far West with the Far East.

An examination of the map of the Mediterranean shows at a glance that PROLEMY had a predecessor, even if he had not informed us of this himself in the introduction to his Geography. He tells us that this was MARINUS of Tyre, who lived shortly before him, and from him we learn that, even at that time, periploi were in existence, that is, descriptions of the Inland Sea.

The name of MARINUS of Tyre is memorable in hydrography, for it is probably he who issued, with his periplus, the first hydrographic chart of the Mediterranean. Definite information exists that in the second century after Christ, and thus during the life of PROLEMY, charts were in use and that the periplus to which they belong was known as "the fish of the Tyrian Sea" for this originated in Tyre. However, no trace of this chart has yet been found and the oldest of these periploi which preceded the Tyrian fish evidently dates from six to four Centuries B. C.

MARCIAIUS, who is supposed to have lived in the 5th century, copied the periplus of MENIPPUS of Pergamus who was the protagonist of direct sea voyages as opposed to the coasting voyages described by his predecessors. In the preface of this copy he gives the names of no less than 15 authors of periploi (and he adds that there were yet others which it seemed superfluous to mention) which must have been earlier than MARINUS of Tyre.

With the exception of one Carthaginian, these authors were all Greeks, and the sailing directions of the greater number of these are confined to the Mediterranean. One of them gives, in addition, a description of the countries on the coasts of the Red Sea, another describes some parts of the Indies; a third deals with the navigation and trade of the East coast of Africa, of India and of China, and finally SEMILAS issued a periplus of the whole of the world as then known.

Copies of two of these periploi have been found, namely those of SCYLAX of Caryande and the STADIASMUS.

A copy of a copy, (it is not known how many intervening copies there were), of the first manuscript, dated in the 12th century, is now in the Bibliothèque Nationale in Paris. On a modern chart of the Mediterranean and Black Sea. NORDENSKIÖLD gives the periplus of SCYLAX, and this chart shows us that the mean of his distances is much more correct than that adopted by PROLEMY seven centuries later.

The Stadiasmus, or circumnavigation of the Great Sea (the Mediterranean and the Black Sea), written by an unknown author, and which appears to belong to the 5th century, commences at Alexandria. The mean of its distances agrees well with that of SCYLAX who had determined it nearly one thousand years earlier, and the configuration of the coast is better than that of his predecessor because the errors in the true distances were smaller. A copy of a copy, dating from the 10th century, is in the Royal Library of Madrid.

All this shows that our knowledge of very ancient cartography comes from Greek and Alexandrian sources and that the Romans contributed but little to the development and knowledge of hydrography in the Mediterranean, in spite of the frequent voyages and the numerous naval expeditions which they made.

Towards the end of the 4th century, the great migration of peoples began. The Roman

Empire broke up, the Barbarians took possession of the coasts of the Mediterranean and civilisation disappeared as by enchantment; it seemed that no traces of the periploi and of the work of PROLEMY remained. However they must have survived this cataclysm for, besides the copies or periploi mentioned, a copy of the charts and the text of PROLEMY, dating from the 13th century, was discovered in one of the manuscripts on Mount Athos, and other copies of the 13th and 14th centuries have been found in the Library of the Vatican. The Mt. Athos copy was published in 1478 by Jacobus ANGELOS of Scarpia and is one of the most ancient printed charts known.

As a proof that cartographic knowledge was entirely and suddenly lost in the 5th century, the "wheel maps" of bad repute are brought forward. They have been found in considerable numbers and represented the world in a most primitive manner. The oldest of these give, in the centre of a world of spherical form borrowed from PROLEMY, the town of Jerusalem and above it Adam, Eve and the promontories of Sinai and Caucasus; they show all the rivers of Paradise, and the Mediterranean is but a line running from the centre towards the lower part of the map. It is a question whether these maps, which undoubtedly show the pieties of their authors who preferred symbolism to reality, are really a proof of extreme ignorance of cartography; it seems that there is every reason to believe that these wheel charts had really nothing to do with cartography and were no more than symbolical and religious drawings made with a purely philosophical object.

Besides, who would use these maps, which had no connection with truth and which contained no useful information, when, as is proved by the various editions of the periploi and of Ptolemy's works, there existed maps of the world, and particularly charts of the Mediterranean, which contained the best information then obtainable. However, a certain number of these maps and charts must have been destroyed by the second great fire at the famous Library of Alexandria in A. D. 390.

The fact that so many wheel maps have been found and that there is not even a sign of any separate charts of these distant periods is not difficult to explain. Wheel maps were never used on board ship. They are to be found in the manuscripts which have been preserved in quiet and safe monasteries, whereas separate charts used on board ship were probably thrown away or destroyed when they had become spoiled, worn out, or out of date, even as worn out cordage or sails were thrown away or destroyed. Also, where could they have been preserved? There was no monastery or library which would want to have them, for nobody could be sufficiently foreseeing to understand the great value which these worn out documents would have for posterity. Even of the following eras, which commence in about 1330, separate charts are still very rare.

The first true chart, of which mention is made, is the chart which was apparently used during the Crusade of Saint Louis in 1270 and it is mentioned in a manuscript of the 13th or perhaps early 14th century, that amongst the instruments which seamen used for measuring sea miles, there were charts, compasses and the pole star.

The first chart which has been discovered and which has a definite date on it is the "portolan", a modern Italian and Spanish name given to a periplus of Petrus VISCONTI of 1311; there is nothing symbolical in this and it has no connection with the wheel maps, but has a close affinity to the Ptolemaic map. The map known as the "Pisan map", an undated work of an unknown Genoese, was probably published some ten years earlier, and between the two it seems that a map was produced by Giovanni de CARAGNANO. The work of Angelino DULORTI appears about a quarter of a century later than that of VISCONTI.

These maps of the Mediterranean and of the Black Sea were drawn on a large sheet of parchment and on them, exactly as on later charts, scales and loxodromic lines are shown. But it is curious to note that while the true loxodromic lines were drawn with the greatest care and are still, even to-day, clear and straight in spite of the shrinkage of the parchment, the scale is roughly hand drawn and is in the form of a ribbon. Was this an attempt to show, by this deliberate want of care, that dividers were not yet used for measuring distances on the charts, but only a divided ribbon?

It is permissible to assume from the presence of these loxodromic lines on these portolans that already the ship's compass was frequently in use in the Mediterranean, it having been introduced in the Scandinavian countries towards the middle of the 13th century; it had been thought that it was introduced into the Mediterranean very much later.

Portolans are not graduated and they have neither meridians nor parallels, and the projection on which they were constructed is unknown. But a close examination of NORDENSKJÖLD's works which include a large number of portolans from the 14th to the 16th century inclusive in connection with modern charts, seems to indicate that the projection corresponds nearly to that of Mercator. However it seems probable that this must be looked upon as a fortuitous coincidence rather than that this projection was known before 1513, to which date it has been traced on a small scale map of Europe drawn by Erhard ETZLAUB of Nuremberg.

But when meridians and parallels were applied to the portolans, there was extraordinary difficulty in adopting a uniform measure for these coordinates and, in the end, a "potolan mile of about 3'15 of latitude at the equator, was accepted, a unit which shows how correct were the ideas of SCYLAX formulated nearly nineteen centuries earlier.

These portolans of the Mediterranean, and their successors as far as the 17th century, are all of the same form and are on nearly the same scale, namely about 1:6,000,000; the data on

each appearing on the others. The drawing was done in various colours, which were frequently gaudy, and the successive cartographers evidently followed the same rules in applying them, though some of them erred owing to inaccuracy in their work.

This harmony induced NORDENSKJÖLD to seek a common origin for portolans and he considers that it is to be found in a work of Catalanian derivation which seems to have been published between 1266 and 1290.

The standard chart, suggested by Mr. KNORR and Monsieur RENAUD existed, therefore, at the end of the 13th century, but in a primitive form; it was the final result of the experience gained by seamen during eighteen centuries, that is since SCYLAX of Caryande. Would it not be possible to make it re-arise in a more complete form six and a half centuries later?

The cartographers of the middle ages who drew it up had two great advantages: firstly, symbols and abbreviations had not to be considered, for there were none on charts and, secondly the number of those who did such work was, undoubtedly, very small. But, on the other hand, they had tremendous difficulties to overcome in the actual construction of the chart, namely, in connection with distances, azimuths and the projection.

The standardisation of charts is now but a question of uniformity in symbols and abbreviations which is well on the way to solution. As to the number of Hydrographic Surveyors, which has much increased since those days, who must now solve the problem, a sincere desire to assist in reaching a solution will suffice for the attainment of the end in view. No one doubts, in fact all are sure, that the Delegates have come to the Conference with this desire in their minds and being convinced that the work of the Conference will again bring the goal nearer, I offer to the Delegates my best wishes for its success.

Your Highness,

In compliance with the great traditions of the illustrious House of GRIMALDI, and following in the footsteps of Your greatly regretted Grandfather, Prince ALBERT, You have graciously consented to take this Conference under Your patronage. Allow me, therefore, to request Your Highness to open its proceedings.

OPENING SPEECH BY PRINCE PIERRE OF MONACO

(Translated by the I.H.B.)

Gentlemen,

It is a great and deep pleasure to me to be called upon to-day to greet the second session of the International Hydrographic Conference at Monaco in such harmonious surroundings: on the shore of this sea which has played so great a part in the course of our civilisation, in this little Country whose history has so frequently been at sea and, finally, within these walls of the monument erected to the greatness and fecundity of the Ocean by one its most fervent apostles. During these sessions I believe that you will feel somewhat at home in the Principality of Monaco and the Prince, when enjoining me to transmit to you his wishes for the success of your work, expressed this hope. Moreover, the eminent men who have represented you here have felt this and even been fully assured of it, I trust, during this first period of five years.

At this time when your Directing Committee, which has gathered to itself the greatest sympathy and high esteem, is about to be renewed, I wish to pay respect to the memory of its late President, Admiral Sir John Franklin PARRY. The descendant and successor of those seamen who are the builders of the civilised world, he bore, among his own, the name of that great navigator Sir John Franklin, as if, so it would seem, better to incarnate his race and his work. He always fully represented both and his empty place here is particularly touching, in the dawn of this Assembly which was his last preoccupation in life.

Gentlemen,

In declaring the International Conference of 1926 to be open, I desire to express the wishes, which are in all thoughts, for the success of the great Institution at Geneva to which you are affiliated and whose work you try to extend to the limitless oceans: order, safety and peace. These noble efforts, which have recently opened such wonderful prospects in the lives of existing peoples, have already become the glory of this age so full of sorrow; and, from now, everything undertaken or supported by the League of Nations carries with it some of our hopes.

PART. I

A

LIST OF DELEGATES TO THE
SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE

MONACO 1926.

STATES MEMBERS OF THE I. H. B.

ARGENTINE:	Captain J. FABLET. Lieut-Commander T. MONTI.
BRAZIL:	Captain M. de OLIVEIRA SAMPAIO.
BRITISH EMPIRE:	Captain H. P. DOUGLAS, C. M. G. A. D. C. Commander V. R. BRANDON, C. B. E. Commander F. E. B. HASELFOOT, D. S. O. Commander H. D. WARBURG.
CHILE:	Commander Juan T. GERKEN.
CHINA:	Commander SHAO Chung. Lieut-Commander CHEN Chia Yuen.
DENMARK:	Captain H. V. RAVN. Captain H. O. RAVN.
EGYPT:	Monsieur RICHARDS. Mahmoud Bey BAYRAM.
FRANCE:	Ingénieur Hydrographe Général E. FICHOT. Ingénieur Hydrographe en Chef de 1 ^{re} classe P. de VANSAY de BLAVOUS Capitaine de Frégate CROISSANDEAU.
GERMANY:	Captain SCHWEPPE. Chief Hydrographer Surveyor ZACHARIAS. Dr. RAUSCHELBACH.
GREECE:	Commander D. RASIKOTSICAS. Lieut-Commander A. GOLEMIS.
ITALY:	Commander C. BALDI. Professor M. TENANI.
JAPAN:	Captain T. KAWAMURA. Captain T. HORI.
MONACO:	Monsieur F. BUTAVAND. Monsieur B. GALLÈPE.
NETHERLANDS:	Captain J. L. H. LUYMES. Captain J. C. F. HOYKAAAS.
NORWAY:	Commander E. BJØRSET.
PERU:	Captain E. CABALLERO y LASTRES.
POLAND:	Lieutenant G. KLOSSOWSKI.
PORTUGAL:	Lieut-Commander A. F. LOPES.

SPAIN :	Capitan de Navio e Ingeniero Hidrografo don Léon HERRERO y GARCIA. Commander W. BENITEZ. Professor O. de BUEN.
SWEDEN	Commodore G. P. REINIUS. Commander E. BOUVENG.
UNITED STATES OF AMERICA :	Captain W. S. CROSLY.

LEAGUE OF NATIONS

Dr. K. HARADA.
Commander M. NORTON.
Monsieur A. de ROUVILLE.

STATES NON-MEMBERS OF THE I. H. B.

INDIA (British) :	Lieut-Commander T. M. S. MILNE-HENDERSON O. B. E.
YUGOSLAVIA :	Lieut-Commander CHORDASITCH.

INTERNATIONAL HYDROGRAPHIC BUREAU

Rear-Admiral J. M. PHAFF.
Rear-Admiral A. P. NIBLACK.
Commander G. SPICER-SIMSON. D. S. O.

PART I

B

SUBJECTS FOR DISCUSSION

(Including those introduced during the Conference.)

I. CHARTS.

1. SYMBOLS.

- A) *Publication of International Lists of Symbols and Abbreviations.*
 - B) *Symbols to be used on charts for Wireless Stations.*
 - C) *Symbols adopted by the Committee for Sunken Rocks.*
 - D) *Symbols and Conventions for Wrecks adopted by the Committee.*
 - E) *Depth Contours.*
2. INDICATION OF CHANNELS DREDGED TO A CERTAIN DEPTH.
 3. COLOURING OF LIGHT SECTORS.
 4. REFERENCE TO ADJOINING CHARTS.
 5. STANDARDISATION OF TITLES OF CHARTS.
 6. STANDARDISATION OF DATING OF CHARTS.
 7. DIMENSIONS OF CHARTS.
 8. SEA LIMITS.
 9. SPECIAL INDICATION OF NEW PART OF EXCHANGE COPIES OF CORRECTED CHARTS.
 10. INFORMATION CONCERNING DANGERS MARKED "P. D." AND "E. D."
 11. METHODS OF PRINTING CHARTS — REPRODUCTION — COPPER PLATES, ENGRAVING AND REPAIR.
 12. ORIGINAL CHARTS.
 13. SAFETY LANES AND DANGER ZONES.
 14. TIDAL INFORMATION TO BE GIVEN ON CHARTS.
 15. COPYRIGHT OF HYDROGRAPHIC PUBLICATIONS.
 16. DEFINED ZONES WITHIN WHICH CHARTS SHOULD BE BASED ON THE SAME CONSTANTS.

II. SAILING DIRECTIONS.

1. INDICATION OF SOURCE AND DATE OF INFORMATION RELATIVE TO FOREIGN COASTS IN NATIONAL SAILING DIRECTIONS.
2. PUBLICATION OF AN INDEX-CHART OF ORIGINAL SAILING DIRECTIONS.
3. TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS.
4. UNIFICATION OF TITLES OF PUBLICATIONS.
5. OVERLAPPING OF HYDROGRAPHIC PUBLICATIONS.
6. USE OF UNOFFICIAL PUBLICATIONS.
7. BROADCASTING OF NAUTICAL INFORMATION.

III. LISTS OF LIGHTS.

1. ERRATUM IN THE REPORT OF PROCEEDINGS OF THE LONDON CONFERENCE OF 1919. (Section III, Sub-Section N, paragraph 2, page 35).
2. RANGE OF VISIBILITY OF LIGHTS.
3. BEARINGS TO BE GIVEN FROM SEAWARD IN THE LIST OF LIGHTS.
4. INFORMATION AS TO VARIOUS SIGNALS TO BE INSERTED IN THE LIST OF LIGHTS.
5. TABULAR METHOD OF COMPILATION OF THE LIST OF LIGHTS (Use of English or French in the Headings of Columns.)

IV. NOTICES TO MARINERS.

1. LIMITS OF OCEANS AND SEAS.
2. INSERTION IN NOTICES TO MARINERS OF ONE OR MORE BEARINGS FOR LOCATING POSITIONS.
3. PERIOD OF PREVIOUS NOTICE TO BE GIVEN BEFORE THE INSTALLATION OR ALTERATION OF AIDS TO NAVIGATION.
4. MENTION, IN NOTICES TO MARINERS, OF THE INTENTION TO ISSUE FURTHER NOTICE ON ANY SUBJECT.
5. NOTICES OF A TEMPORARY NATURE.
6. DISSEMINATION OF NOTICES ABROAD.
7. TRANSLATION INTO ENGLISH OR FRENCH OF THE FIRST NOTICE TO MARINERS OF EACH YEAR ISSUED IN A NATIONAL LANGUAGE OTHER THAN ENGLISH OR FRENCH.
8. TABLE OF NAVIGATIONAL WARNINGS IN THE INTERNATIONAL CODE OF SIGNALS.

Va. CATALOGUES.

1. INSERTION IN CATALOGUES OF DATE OF LATEST CORRECTION.
2. USE OF ENGLISH OR FRENCH IN PUBLICATIONS OTHER THAN THOSE IN ENGLISH OR FRENCH.
3. PUBLICATION OF A CATALOGUE OF ORIGINAL CHARTS.

Vb. MISCELLANEOUS.

1. TRANSCRIPTION OF GEOGRAPHICAL NAMES.
2. DISTINGUISHING SIGNALS FOR SURVEYING VESSELS.
3. BUOYAGE.
4. COLOURS OF HARBOUR LIGHTS ON BREAKWATERS.
5. SIGNALS IN GENERAL.
6. PORT SIGNALS.
7. STANDARD CATALOGUE OF MARITIME GEOGRAPHICAL POSITIONS.
8. FACILITATING VISITS OF STUDENTS.
9. MEASURES TO PROCURE GOOD HYDROGRAPHIC LITERATURE.
10. DISTANCE TABLES.
11. CHARGES FOR RADIO BEARINGS.
12. STUDY OF INSTRUMENTS.
13. STUDY OF OCEAN CURRENTS.

VI. TIDES.

1. INFORMATION CONCERNING TIDES WHICH SHOULD BE INSERTED ON CHARTS.
2. INFORMATION CONCERNING TIDES WHICH SHOULD APPEAR IN SAILING DIRECTIONS.
3. USE BY THE MARINER OF HARMONIC CONSTANTS FOR THE PREDICTION OF TIDES AND METHOD OF PREDICTION.
4. PUBLICATION BY THE INTERNATIONAL HYDROGRAPHIC BUREAU OF A VOLUME CONTAINING THE HARMONIC CONSTANTS OF THE WORLD.
5. ESTABLISHMENT OF AN INTERNATIONAL LOW WATER DATUM FOR MARINE CHARTS AND TIDE TABLES.
6. TRANSLATION OF HEADINGS OF TIDE TABLES.

VII. HYDROGRAPHIC SURVEYS.

1. USE OF AIRCRAFT FOR HYDROGRAPHIC SURVEYS.
2. SOUNDING BY SWEEPING AND BY ECHO.
3. INITIATING SURVEYS OF COASTS INSUFFICIENTLY SURVEYED.

VIII. ADDITIONAL.

1. ADOPTION OF RESOLUTIONS OF HYDROGRAPHIC CONFERENCES.
 2. RAPID DISSEMINATION OF PUBLICATIONS.
 3. REQUEST FOR INFORMATION CONCERNING THE WORK PRESCRIBED BY ARTICLE 9 OF THE STATUTES.
 4. ORGANISATION OF FUTURE CONFERENCES.
 5. SUPPLEMENTARY CONFERENCE.
 6. INVITATIONS.
 7. TRANSFER OF THE SEAT OF THE BUREAU.
 8. DESPATCH OF PUBLICATIONS BY THE BUREAU.
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PART I

C

[page 3]

REPORT ON THE FINANCIAL ADMINISTRATION OF THE BUREAU.

From 1st July 1921 to 1st October 1926.
Submitted to the Conference ()*

PREFACE.

This report is not a report on the accounts; the Directing Committee considers that the auditing of the book-keeping can only be done by the careful checking of the entries in the books themselves. This checking has been carried out annually by officials of the League of Nations, and their reports have been sent to the States Members; the Conference is, of course, entirely free to make such audit as it may consider necessary.

However, though the account books clearly show the amounts received and expended, they do not show for what reasons, except perhaps in a very summary manner, and this is the pertinent question. The following is, therefore, a general account of the financial administration of the Bureau during the past five years, showing the principal items of expenditure, the reasons for any increase or decrease therein, and the general principles which have been adopted by the Directors for the purposes of this administration.

It must not be expected, therefore, that the figures given in this report will be found in the books to within a centime; all sums, mentioned in the report, are in Swiss francs; during two and a half years three different accounts, which were not reduced to one, having been kept, absolute accuracy of the figures for that period, when reduced to Swiss francs, could be obtained only by an entire recasting of the books, an amount of work which would be out of all proportion to the small advantages gained. Thus these figures are but approximate; the general average is correct and this suffices for the object in view, i. e. to give a clear idea of the amount and the evolution of the expenditure.

This report is not an extract from the accounts, it is a commentary on and the complement to them.

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MONETARY STANDARD OF THE BUREAU — BANK DEPOSITS.

The controversy raised by the Auditor, sent by the League of Nations in 1924, on the subject of the monetary standard of the Bureau is known. The details thereof are given in *extenso* in the volume entitled "Proposals" which is the basis of the Agenda of the Conference. This controversy not having reached a conclusion, the monetary standard has been, and still remains, the Swiss franc, i. e. the legal currency of the Swiss Confederation.

Yet the Swiss franc underwent considerable fluctuations in value in 1921-22 and, particularly, threatened to fall greatly on account of interior political conditions in Switzerland.

These circumstances induced the Directing Committee to convert the reserve fund of the Bureau into Sterling, which it considered to be more stable. This conversion, which was justified by later events, has been maintained until now.

Thus the Bureau has three Bank Deposits; the principal, in Sterling, represents by far the greatest item of the Bureau's assets; generally speaking, it is drawn upon only for the small and few expenditures made in England and to feed the other deposits early in the year before

(*) Page numbers in brackets are those of the original report and are inserted to facilitate references to parts quoted in the Proceedings.

[page 5] the first contributions come in. Then there is the Swiss franc deposit, to which the contributions are paid and which is drawn upon to feed the third deposit, (i. e. that in French francs) to pay salaries and expenditure incurred abroad (except in England). The French franc deposit is used to meet local expenditure; it is always kept fairly small, just enough for the estimated monthly requirements.

These three deposits are covered by a policy of insurance by which any loss, due to the failure of the Bank which holds them, will be made good to the Bureau.

On 1st September 1926, the amounts of these deposits were,

	<i>Swiss franc equivalents at rates on 1st September 1926.</i>
Sterling.....	201,851,60
Swiss Francs (.....	38,559,90
French Francs (.....	
<i>Total.....</i>	<i>240,411,50</i>

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FLUCTUATIONS IN RATES OF EXCHANGE.

The very considerable fluctuations which have occurred in rates of exchange since the creation of the Bureau have obliged the Directing Committee to take special precautions to avoid, as far as possible, any detriment to the Bureau. One such precaution, which consisted in converting the greater part of the Bureau's funds into sterling, has just been mentioned, the others will be dealt with under the subjects to which they refer.

The French franc, in particular, having undergone extremely wide fluctuations in value in both directions, the balance of this deposit has always been limited to the amount strictly necessary, as stated above.

Such fluctuations not being foreknowable and the Directing Committee being of opinion that it would not be a prudent administrator if it employed the Bureau's funds in speculative operations, has made it a definite rule to exchange from one currency to another only when the balance of accounts requires it, without in any way taking into consideration the probable future changes in the rates of exchange.

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BOOK-KEEPING.

The book-keeping went through three successive stages:

(1) 1921. — The Bureau commenced work in July; the administrative organisation developed gradually. Since the immediate requirements of establishment absorbed the funds in hand, there was no question of building up a reserve and there was no apparent necessity to keep any other but an account of current expenditure in French francs. All receipts (Contributions) were therefore converted into French francs, an account of receipts was kept as also an account of expenditure under 17 headings. These two accounts were merely entries of the cash operations; the total of the receipts diminished by the total of the payments gave the amount in hand at the end of the year.

(2) 1922-23. — The heavy expenses of establishment having been met it became permissible to build up a reserve fund; also, practice had shown the convenience of being able to make certain payments in currencies other than French; thus accounts in Swiss francs and in Sterling were drawn up at the same time as Bank deposits in these currencies were created, such accounts being in the same form as the French franc account. The system was exactly the same.

(3) 1924-26. — This system had the advantage of simplicity but it was impossible at any moment to balance the three accounts in one account and thus it was not possible to have more than a fragmentary idea, in three different currencies, of the financial administration and position of the Bureau, and the fluctuations of exchange between these currencies made the accounts incommensurable. There was no reserve account, the details of the Bureau's assets and liabilities did not appear; the expenditure for furnishing and for the library, which is not of the same character as current expenditure, for it is made in exchange for objects which retain a certain value, could not be extracted and finally the accounts, being purely a register of receipts and payments of cash, gave no indication of debits and credits of the Bureau, another hiatus of high importance.

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Mr WATTERSON, Chief Accountant of the League of Nations, who in 1924 audited all the Bureau's accounts for 1923, expressed the wish in his Report that a Balance Sheet be drawn up at the end of each year. For this purpose it was necessary to adopt an entirely different system of book-keeping and this was done. The accounts had been kept on the "Single Entry" system till then, but from that time of the "Double Entry" (1) system was adopted and the accounts from 1st January 1924 were recast on this system.

The basis of these accounts was the Swiss franc, the monetary standard of the Bureau i. e. all accounts were opened in Swiss francs. Accounts in Sterling and in French francs are opened as required; special exchange accounts are kept in which are entered all operations of conversion from one currency to another (e. g. a purchase of French francs to feed this Bank deposit) and these make it possible at any moment to transfer the Sterling and French franc balances to the corresponding accounts in Swiss francs, so that a Balance Sheet can be drawn up in a single currency. Expenditure on account of furniture and the library is always entered in Swiss francs, so that these items of the assets of the Bureau may have a fixed value. On account of its special interest the expenditure in connection with the Publications of the Bureau are entered in a separate account.

A special account entitled "Capital of the Bureau" is increased, on 1st January, by the total of the annual contributions due on account of the change of financial year, and it is diminished, on the following 31st December, by the total non-recoverable expenditure during the year.

Lastly a depreciation reserve is maintained by which the value of the furniture is wiped out in 10 years (2).

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CHECKING OF THE BOOK-KEEPING BY THE DIRECTING COMMITTEE.

During the five years the Directing Committee has held meetings monthly to check the accounts of the previous month. At these meetings there are laid before the Committee special statements, which give a summary of the operations during the month and the financial situation at the end of the month, and the vouchers (Bank statements, counterfoils of cheques, bills, receipts, etc.). The Committee checks the books against the vouchers and the monthly statements and makes any necessary decisions.

BALANCE SHEET.

At the end of each year the accounts are closed; in 1921, 1922 and 1923 it was considered sufficient to give the totals as shown in the books on 31st December, but since 1924, all the accounts have been reduced to Swiss francs, as stated earlier, after which the accounts dealing with current expenditure are eliminated by subtracting the balance thereof from the "Capital of the Bureau" account; the other annual accounts (Profit & Loss, Publications, Loss on Exchange) are similarly eliminated: the result is the *Balance Sheet* which then contains only the assets and liabilities of the Bureau. The excess of the former over the latter is the value, on 31st December, of the Capital of the Bureau. This Balance sheet is the starting-point for the following year's accounts.

For 1924 it was necessary to draw up a Balance Sheet for 1923 (see p. 36, *Annual Report* for 1924) and this was done by extracting the necessary items from the old accounts.

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ESTIMATES OF EXPENDITURE.

The Statutes of the Bureau (Article 48) lay down that the Directing Committee shall, during the month of September in each year, draw up and publish Estimates of expenditure for the following year.

Such estimates have been regularly drawn up and sent to the States Members. They are reproduced in the next Annual Report issued.

Mr WATTERSON, Chief Accountant of the League of Nations, touched on this subject in his Report (rendered in 1924) on the accounts of the Bureau for 1923. In this report, in which he dealt not only with the correctness of the accounts laid before him, but also made general criticisms on the administration, not only of the accounts but also of the finances of the Bureau,

(1) For the benefit of those Delegates who are not familiar with book-keeping subjects it may be mentioned that, in the "double entry" system, each account has 2 columns, viz: credit and debit. Each operation is entered twice, i. e. once as a debit to one account and once as a credit to another account. The individual balances, either debtor or creditor, of all accounts must always balance exactly and thus no error can pass unperceived.

(2) No depreciation is provided for the Library as the greater part of its contents was acquired by gift, thus its value is very much higher than the total amount expended thereon as shown in the books.

[page 10] he says that "it is doubtful as to whether much importance can be attached to them (the estimates) for the simple reason that they are not binding on the Directing Committee". By this he evidently meant that such estimates do not constitute a budget which opens limited credits under each head of expenditure, as is done in all Government Departments and by the League of Nations, and that the Directing Committee could ignore the estimates and go beyond the figures given therein.

Several useful comments may be made in this connection.

In the first place, the Statutes make no provision for the approval of the estimates by the States Members. There is no doubt, however, that if any Member made objections to the figures published, the matter would be looked into most carefully. In the nature of things there cannot be a restrictive budget except after approval of the mandatories and this is the method followed in every State and by the League of Nations where the annual General Assembly gives its approval. The advantages of limitation by those only whose expenditure is thus limited are not apparent — the obvious result would be that the estimates would be swollen in order that the limits set should not interfere with free action.

Then also, the drawing up of the estimates of a Government Department exactly reverses the procedure followed in the case of the Bureau. For a Government Department, first the work to be done and the service to be provided are determined, then the cost thereof is ascertained, a credit to meet this is voted, and finally, taxes and other methods of raising money to meet the credit are fixed by vote. The sum raised corresponds to services definitely determined.

In the case of Bureau, on the contrary, the total credits are definitely fixed — they are the contributions fixed by the Statutes — the work to be done and the service to be provided are in no way either fixed or regular. The objects of the Bureau are purposely made general and elastic in order to leave the Directors free to act for the best as circumstances dictate. Consequently it is practically impossible to be bound in advance not to spend more than a certain sum under any particular head of expenditure. The only object in view is to avoid waste and so to adjust the work of the Bureau that its annual income shall not be exceeded.

RECEIPTS DURING THE FIVE YEARS UNDER CONSIDERATION.

I. — CONTRIBUTIONS.

The following table is a statement in Swiss francs of the contributions of the States Members during the five years :

Year	Total Contributions according to Statutes	Difference fr m year to year	Amount Received	Contributions due for these years unpaid on 31 st December of each year					
				1921	1922	1923	1924	1925	Total
1921	236,000.00		149,500.00 (5)	94,500.00					94,500.00
1922	240,000.00	+4,000.00 (1)	259,728.05 (2)		35,330.00				35,330.00 (6)
1923	236,000.00	-4,000.00 (2)	209,330.00 (7)		8,000.00	62,000.00			70,000.00
1924	236,000.00	..... (8)	264,388.45 (9)		4,611.55	14,000.00	22,000.00		40,611.55
1925	228,000.00	-8,000.00 (3)	227,962.70 (4)		2,648.85 (10)	8,000.00 (10)	8,000.00 (10)	22,000.00	40,648.85
1926	232,000.00	+4,000.00 (4)	Figures not yet known						

NOTES :

- (1) Increase due to adhesion of Egypt in 1922.
- (2) Decrease due to Monaco's contribution being fixed at 6,000 French francs (instead of 4,000 Swiss francs). This amount being variable in Swiss francs it is not taken into account in and after 1923.
- (3) Withdrawal of Belgium.
- (4) Adhesion of Poland.
- (5) Of which 8,000 francs was paid in advance (for 1922) by Norway.
- (6) In 1921, the Bureau not having commenced work until July, the Directing Committee decided that any contributions received, even below the statutory amount, would be accepted as complete ; thus these figures

- refer to 1922 contributions only. Out of 94,500 francs remaining due at the end of 1921, 64,658.05 francs were received during 1922.
- (7) Of which 4,000 francs was paid in advance (for 1924) by Siam and 4,000 by Poland.
- (8) Of which 3,000 francs was paid in advance (for 1925) by Spain.
- (9) Of which 3,000 francs was paid in advance (for 1926) by Spain.
- (10) These three sums (totalling 18,648.85 francs) represent the amounts due by Belgium, which State, having withdrawn its membership, appears on the 31/12/25 Balance Sheet as a Debtor and not as a Member in arrears.

[page 12] It will be seen from this table :—

1st. That the statutory income of the Bureau has been somewhat diminished owing to the withdrawal of BELGIUM and this has not been completely counter-balanced by the adhesion of POLAND.

2nd. That the payment of contributions, tardy in 1923 (*viz.* : 70,000 francs arrears at the close of the year), improved considerably in 1924 and 1925. In fact, if from these sums (40,000 francs odd) due at the end of these years, the amounts due by BELGIUM for the previous years (*i. e.* 20,000 francs on 31/XII/24 and 18,000 francs on 31/XII/25) be deducted, there remains due amongst all the other States 20,000 francs at the end of 1924 and 22,000 francs at the end of 1925, which are not 10 % of the total, a most satisfactory state of affairs; the practical equality of the two figures appears to indicate that stability is being attained and it is hoped that the States Members will maintain it by regular payment of their contributions.

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II. — SALE OF PUBLICATIONS.

The number of publications sold, nil at first, has increased considerably in 1925 and 1926. The following are the figures, omitting 1921 and 1922 when no publications were issued :—

1923.....	Swiss Francs	12.00
1924.....	" "	243.30
1925.....	" "	384.80
1926 (to 1 st September).....	" "	401.60

It should be noted that " Payment on Delivery " does not exist universally and thus the Bureau is obliged either to ask for payment in advance, which in many cases may give offence, or (as is the practice) to trust the purchasers who, more often than not, are entirely unknown to it; the smallness of the sums involved makes legal action against a debtor in a distant country useless. Nevertheless the number of bad debts is minute and most payments are made rapidly (49 francs still due on 31/XII/25, most of which was for orders filled in December 1925).

However, this source of income, so far, has been insignificant and the principal point of concern in the increase is the indication it gives of the interest taken in the work of the Bureau rather than the financial result.

The Directing Committee has taken steps to increase these sales as much as possible; at its request certain Hydrographie Offices have kindly included a list of the Bureau's publications in the catalogues of their own. The British "*Nautical Magazine*" inserts the list, gratis, in each monthly issue.

III. — INTEREST ON BANK DEPOSITS.

The Bank pays interests on the Bureau's deposits, at a somewhat low rate it is true, but these deposits are repayable at sight. At the demand of the Bureau these rates were increased as from 1st July 1925 and are shown below :—

Deposit in :	Rates before 1/VII/25		Rates since 1/VII/25
Swiss Francs	Nil		1 %
Sterling	1 %	2 % less than Bank of England rate of discount (thus 3 % now).	
French Francs	3 %		3 %

[page 14] Interest is paid half-yearly, on 30th June and 31st December, and the following are the sums received :—

Year 1921.....	408.00 Swiss Francs
1922.....	862.50 " "
1923.....	1,278.70 " "
1924.....	2,022.55 " "
1925.....	3,678.75 " "
1926 (1 st half-year).....	3,359.50 " "

The increase in the rate of interest on the Sterling deposit, which is the principal item in the funds of the Bureau, is the cause of the considerable increase in this source of income which will probably return 6,000 Swiss francs in the current year.

EXPENDITURE DURING THE FIVE YEARS UNDER CONSIDERATION.

Endeavours were made, in keeping the books for 1924 and later years, to profit by the experience acquired by classifying the expenditure more logically than that indicated by earlier circumstances. This new classification is followed below, thus facilitating reference to the statements given in the Annual Reports.

It is made in the following order :—

The first expenditure given is that which is irrecoverable, termed *Current Expenditure* ; it is divided into four headings, viz : PERSONNEL (3 sub-heads) ; OFFICE (3 sub-headings) ; WORKING EXPENSES (4 sub-headings) and MISCELLANEOUS (3 sub-headings).

The cost of issue of *Publications*, although irrecoverable, is entered in a special account.

Expenditure in connection with the purchase of *Furniture, Instruments* and books for the *Library* is entered in special accounts which appear as assets of the Bureau in the *Balance Sheet*, for the articles purchased retain a certain value.

The general classification of Expenditure is therefore as follows :

CURRENT EXPENDITURE	PERSONNEL.....	{ Salaries. Insurance. Travelling Expenses.
	OFFICES	{ Rent & Insurance. Maintenance. Fuel, Light & Water.
	WORKING EXPENSES.	{ Stationery & Printing. Postage, Telegraph & Telephone. Transport & Customs dues. Translation, Extracts, etc.
	MISCELLANEOUS .	{ Bank charges & Insurance. Entertainments & Visits. Minor Expenses.

PUBLICATIONS (Cost of Issue).

LIBRARY.

FURNITURE.

The various headings will now be dealt with in succession.

A. — PERSONNEL.

I. Salaries.

The salaries of the Members of the Directing Committee and of the Secretary General are fixed by Statute.

The salaries of the subordinate personnel were originally fixed in French francs but the constant increase in the cost of living, due to the fall in value of this currency, entailed continual revision of the rates of salary. In order to avoid this all salaries were based on the Swiss franc as from 1st May 1924 ; until 1st November 1925 payment was made in French francs at the average rate of exchange for the previous month but, since that date, the option, which the Directors and the Secretary General exercised from the first, of taking either Swiss or French francs, was extended to the whole staff.

The basing of all salaries on the Swiss franc allows an accurate estimate of the Bureau's expenditure to be made.

The following table shows the amounts paid during the five years :—

Year	Directing Committee & Sec.-Gen.	Assistants	Other Employees	Total	REMARKS
1921	56,496.45	Nothing	2,556.20	59,052.65	Directing Committee complete from 16th July; 4 employees from October.
1922	110,700.00	Nothing	11,110.90	121,810.90	Directing Committee complete; 6 employees from March.
1923	103,650.00	4,935.75	10,265.75	118,851.50	President and a single Director from October; one Assistant from 23rd April: Seven employees from October.
1924	103,650.00	12,751.00	14,350.65	130,751.65	President and a single Director until 1st April. Two Assistants from 1st July: six employees during two months; seven during ten months.
1925	110,700.00	26,325.00	20,535.95	157,560.95	Directing Committee complete; Three Assistants from 22nd June; Eight employees to end of October and then nine employees.
1926 to 1st Sept.	64,400.00	20,800.00	15,598.45	100,798.45	President and a single Director from 1st May. Three Assistants; Nine employees.

II. Insurance of the Personnel.

[page 17] The Bureau may be held responsible for any accidents which may happen to the personnel during, or in connection with, their work. In France this responsibility is laid down by an Act which definitely determines the amount of compensation due and automatically makes the employer liable, even where the employee is in fault; in Monaco this is not the case, no special law exists and thus the Bureau may either be relieved of all liability or, on the contrary, may be condemned to pay much higher compensation than that provided for in the French Act.

The Bureau is therefore insured against such accidents; the premium, which is payable in French francs, is in proportion to the amount of salaries paid during the year, at a rate depending on the maximum capital amount insured with the Company. This capital amount was 100,000 French francs until October 1925 when it had obviously become insufficient on account of the engagement of Assistants and the fall in value of the French franc; it was therefore raised to 500,000 French francs.

The Directors and the Secretary General are not included in this insurance.

The premiums paid from 1921 to 1926 are :—

1921	248,55	Swiss Francs	
1922	228,65	" "	(reduction due to fall of French franc).
1923	175,25	" "	ditto
1924	169,95	" "	ditto
1925	294,45	" "	(increase of capital amount insured).
1926	Premium due in October — not yet paid.		

III. Travelling Expenses.

This sub-head includes :

1st. Travelling expenses and change of residence allowances for the Directors and Secretary General when they take up or vacate their appointments.

2nd. Travelling expenses for long journeys undertaken by the Directors, Secretary General or Assistants when travelling on duty.

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3rd The cost of short journeys in the vicinity of the Bureau.

1st Change of Residence Allowances.

Article 44 of the Statutes leaves it to the Directing Committee to fix the amounts of such allowances. The Committee separated the expenses into:

- (a) Personal Travelling expenses, with personal baggage.
- (b) Home removal expenses.

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The former expenses are paid in accordance with their actual cost as certified by the person concerned.

To meet the latter a sum of 7000 Swiss francs, which corresponded approximately to the amount expended, was paid in every case except in that of Admiral NIBLACK whose original residence being much further from the seat of the Bureau, his home-removal expenses were much higher.

The payments made under this sub-heading are:

	<i>Swiss Francs</i>	
1921 — Three Directors and the Secretary General took up their appointments: Travelling Expenses.....	5,547.70	
— Change of residence allowance: 4×7,000	28,000.00	33,547.70
1923 — One Director resigned: Travelling Expenses	448.10	
Change of residence allowance	7,000.00	7,448.10
1924 — New Director took up his appointment:		
Travelling Expenses.....	3,194.55	
Change of residence allowance	10,636.40	13,830.95
1926 — Death of the President: Change of Residence allowance to Lady PARRY.....	7,000.00	7,000.00
TOTAL.....		<u>61,826.75</u>

2nd Travelling Expenses for long Journeys.

	<i>Swiss Francs.</i>
1921 — President's visit to League of Nations.....	681.95
— Share of President's journey to London	240.00
1922 — President and a Director to Rome (to represent the Bureau at the meeting of the Sections of Geodesy and Geophysics of the International Research Council).....	1,395.35
— President to Brussels.....	493.90
1921 — President to Geneva, Paris, Brussels and the Hague (visits to League of Nations and Hydrographic Offices).....	2,558.45
— President to Madrid and Lisbon (to represent the Bureau at the meeting of the Sections of Geodesy and Geophysics of the International Research Council and to visit Hydrographic Offices).....	3,246.95
— Technical Assistant to Paris and Rouen on duty	143.70
1925 — President to Cairo (to represent the Bureau at the International Geographical Congress).....	5,718.70
— A Director to Genoa (visit to Hydrographic Office)	289.45
1926 — Secretary General to Geneva (to League of Nations on duty)	731.55
— An Assistant to Stockholm (Buoyage Committee Meeting)	1,527.60
— Share of a Director's journey to visit Hydrographic Offices (Copenhagen, Oslo, Stockholm, Berlin).....	719.95
— A Director to attend meeting of International Meteorological Committee, Zurich.....	378.30
TOTAL	<u>18,125.85</u>

The cost of these journeys amounted to the following:—

1921.....	108.40	Swiss	France
1922.....	35.15	"	"
1923.....	174.20	"	"
1924.....	153.35	"	"
1925.....	266.85	"	"

Included in these amounts are certain sums paid in order to meet travelling expenses of members of the staff taking up their appointments, and of candidates for employment whom it was considered necessary to interview. The largest individual amount thus paid was 500 French francs.

(1) Rent and Insurance.

a) *Rent.*

The offices now occupied by the Bureau are taken on leases which expire on 1st October 1930, but the Bureau has the right to terminate the leases on 1st October 1927.

The various leases deal with the following:—

French Franc

[illegible]

Thus the total annual rent payable at present is 20,500 French francs.

The terms of the leases do not permit sub-letting or sale, but the fall in value of the French franc having made the rent very low, the landlord would certainly be only too glad to terminate the leases at the request of the Bureau, should this be desirable for any reason.

In 1921, before the present accommodation was found, the Directors rented a furnished room. The sums paid as rent are shown below but to them have been added various small sums paid for the drawing up and registration of the leases.

Page 20] The amounts have been converted into Swiss francs at the rate prevailing on 31st December of the year in which they were paid.

<i>Year.</i>	<i>French francs</i>	<i>Swiss francs</i>	<i>ACCOMODATION SECURED</i>
1921	8,402.80	3,361.15	Second Floor and Library from 1/X/21.
1922	11,525.25	4,392.25	Same.
1923	12,787.30	3,734.60	Same with a room on 3rd floor.
1924	12,570.80	3,494.70	from 1/IV/23.
1925	13,000.00	2,548.00	Same.
1926	18,625.00	—	Same.
<i>Estimate</i>			Same with a set of rooms on 3rd floor.
<i>31 Dec.</i>			from 1/IV/26.

The arrangement of the rooms occupied by the Bureau had to be considerably modified to render them suitable and they had to be renovated. As expenditure for this purpose was confined to the earlier years, no account entitled "Cost of Installation" exists in the present accounts. However, this expenditure, which naturally falls under the head of "Offices" will now be examined.

Generally speaking, the changes made were — the taking down or moving of dividing walls in order to modify the floor areas of rooms, repainting and papering, laying of carpets and linoleum, making or improving the sanitary arrangements, electric lighting, heating arrangements, etc.

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The expenditure thus incurred was :

1921	14,582.50	Swiss francs
1922	6,203.90	" "
1923	2,269.55	" "
1924	Nil	" "
1925	911.40	" "

Total 23,967.35 " "

These figures were obtained by converting the sums actually expended into Swiss francs at the rate of exchange prevailing on 31st December of each year ; they include the cost of certain items of furniture the value of which is not likely to be recoverable, e. g. carpets shaped to fit the rooms, small electric fittings, etc.

The offices on the 3rd floor, taken over on 1st April 1926, have not been done up on account of the approaching Conference, thus leaving the new Directors free to arrange them in their own way ; they must, at the very least, be repainted and papered.

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b) Insurance.

The policies cover *fire, breakage of plate-glass* windows of the library, *accidents* caused by the lift, *theft and burglary*, and accidents or damage caused in any way to *persons not belonging to the Bureau*.

The various insurance policies were revised in October 1925 with the objects of adapting them — 1st to conditions due to the development of the Bureau and 2nd to the increase of liabilities expressed in French francs due to the fall in value of this currency.

The table below gives, in French francs, the various capital amounts covered by insurance :—

RISKS COVERED	CAPITAL AMOUNTS COVERED		ANNUAL PREMIUMS	
	Octob. 1922 to Oct. 1925	Since October 1925	Before October 1925	Since October 1925
	<i>French francs</i>	<i>French francs</i>	<i>French francs</i>	<i>French francs</i>
<i>Fire :</i>				
Building.....	195,000.00	205,000.00		
Damage to neighbours.....	40,000.00	40,000.00		
Loss of rent.....	11,000.00	13,000.00	289.25	437.75
Furniture and library.....	150,000.00	200,000.00		
Rare books.....	uninsured	20,000.00		
Charts & documents	50,000.00	50,000.00		
<i>Lift accidents</i>	500,000.00	500,000.00	325.00	325.00
<i>Third party risks</i>	uninsured	100,000.00	.....	200.00
<i>Plate glass Windows</i>	Replacement of broken panes		73.00	73.00
(covered from 1922)				
<i>Theft & Burglary</i>	72,000.00	Not covered	131.45	.....
TOTALS			818.70	1,035.75

Insurance against theft and burglary has been discontinued for it is unlikely that the offices would be burgled, the amount of cash kept (in the safe) is always very small, and other articles in the offices are guarded by an Office-keeper who lives on the premises.

The premiums paid for the various policies amount to the following sums when converted into Swiss francs :

240.00	Swiss francs	in 1921	(including the cost of drawing up the policies).
356.75	"	" in 1922	(increase of capital amounts, new policy for plate-glass windows).
287.70	"	" in 1923	(decrease due to fall in value of the French franc).
254.35	"	" in 1924	ditto.
245.05	"	" in 1925	(the heavy fall in the value of the French franc more than counterbalanced the increase due to larger capital amounts insured).

[page 22] (II) Maintenance of Offices.

The expenditure under this sub-heading includes repairs, upkeep of paper, paintwork, sun awnings, etc., cleaning and cleaning gear, overhauls and repairs to lift, uniforms of Office-keeper and Messenger, laundry, etc.

The amounts disbursed, converted into Swiss francs, under this sub-heading, are :

645.85	Swiss francs in 1921	
931.05	" " in 1922	
1,241.90	" " in 1923	(office repapered and repainted).
705.15	" " in 1924	
854.40	" " in 1925	

(III) Light, Fuel and Water.

Only the consumption is entered in this account and not the purchase, fitting and upkeep of the stoves and other furnishings.

The Office-keeper, who lives on the premises, is provided with free lighting and heating.

The expenditure under this sub-heading, converted into Swiss francs, was :

338.80	Swiss francs in 1921	
1,290.45	" " in 1922	
894.10	" " in 1923	
1,030.60	" " in 1924	
782.05	" " in 1925	

C. — WORKING EXPENDITURE.

(I) Stationery and Printing.

Under this sub-heading there is included under "Stationery" not only expenditure for office gear but also that incurred in connection therewith, *e. g.* maintenance and repair of typewriters binding of administrative documents, etc.

The printing referred to is that unconnected with the publications of the Bureau properly so-called, viz. Circular Letters, Forms and other printing required in the offices, etc.

[page 23] For these purposes the following sums were expended :

1,421.20	Swiss francs in 1921	
2,765.55	" " in 1922	
3,100.00	" " in 1923	
3,484.40	" " in 1924	
2,782.20	" " in 1925	(decrease due to fall in value of the French franc).

Note. — *The Bureau was spared a certain amount of expense, in this connection, in its early days as it was able to make use of a considerable amount of stationery kindly supplied by the British Admiralty to the International Hydrographic Conference Committee.*

(II) Postage, Telegraph and Telephone.

This expenditure includes postage on all despatches made by the Bureau, including publications ; fees for registration of telegraphic address ; telephone subscriptions and cost of telegrams and telephone calls.

It amounted to :

661.70	Swiss francs in 1921	
459.35	" " in 1922	
1,015.05	" " in 1923	
1,249.15	" " in 1924	
825.00	" " in 1925	

(III) Transport and Customs Dues.

It happens frequently that the Bureau has to pay the transport of furniture, fittings, publications coming from the press, etc. Packages coming from abroad by ordinary or parcel post likewise entail small payments.

With reference to Customs dues, the Principality of Monaco lies within the zone of the French customs and the French Government has granted to the Bureau free entry of only such documents, books and technical instruments as cannot be procured in France. Further, for each consignment the Bureau has to ask in advance for free entry, addressing the request to the Central Administration in Paris, giving many details of which, frequently, it is unaware ; and thus it was not always possible to take advantage of this privilege.

page 23] Expenditure for Transport and Customs Dues was as follows:

1,050.20	Swiss francs	in 1921
385.40	"	" in 1922
377.10	"	" in 1923
330.15	"	" in 1924
120.05	"	" in 1925

page 24] (IV) Translations, Extracts, etc.

Under this sub-heading is entered the cost of all work which is done for the Bureau by persons not belonging thereto. In its early days the staff was very small and certain translations from English into French, or the converse, were done outside; at present this is done only in the case of languages with which the members of the staff are not familiar.

The Bureau has also had to pay certain kind collaborators in Hydrographic Offices or other scientific organisations, who made copies of documents, collated data or made calculations on its behalf.

The following are the amounts thus expended:

Nil		in 1921
598.15	Swiss francs	in 1922
511.20	"	" in 1923
791.90	"	" in 1924
3,154.60	"	" in 1925 (Calculation of Harmonic Constants, 2,500 Swiss francs).

D. — MISCELLANEOUS.

(1) Bank charges and Insurance.

a) Bank charges include the cost of stamped cheques and the small commission charged by the bank for cashing cheques, etc.

These charges amounted to:

37.95	Swiss francs	in 1921
58.65	"	" in 1922
4.40	"	" in 1923
8.00	"	" in 1924
9.85	"	" in 1925

b) As was stated above, the Bureau is insured against the failure of the Bank which holds its funds; should this happen, its loss would be made good in its entirety by the insurers.

This insurance was taken out on 1st November 1923; the original sum insured was £7.100 but now a maximum deposit of £12.000 (of which £10.000 in sterling and £2.000 in Swiss and French francs) is covered.

The following sums have been paid as premiums on these policies:

888.10	Swiss francs	in 1923
1,460.25	"	" in 1924
1,507.65	"	" in 1925

The premiums are paid in sterling and are at the rate of 0.5 % on the capital sum insured.

page 25] (II) Entertainments and Visits.

No expenditure was incurred under this sub-heading in 1921. During 1922 a sum of 194.90 Swiss francs was spent on hire of carriages to pay visits to the local Authorities and for minor entertainments (teas) to visitors.

In 1923 this expenditure amounted to 445.30 Swiss francs of which 311.000 Swiss francs represents the cost of a luncheon given to the Officials of the Principality. The remainder was spent in cab-hire and for minor entertainments.

The amount spent in 1924 was 197.50 Swiss francs, principally in connection with the counting of the votes for the election of the new Director.

During 1925 the expenditure was 1,329.75 Swiss francs including 501.75 Swiss francs for a luncheon to which the local Authorities were invited and 719.15 Swiss francs for a reception of the Technical Committee on Buoyage and Coast Lighting of the League of Nations on the occasion of its meeting at Monaco in November 1925.

(III) Minor Expenses.

Expenditure which cannot be classified on account of its nature or non-recurring character, is entered under this sub-heading, *e. g.* annual gratuities to the postmen, concierge, *et alia*, various subscriptions, advertisements in newspapers for employees, etc.

[page 25]

It amounted to :

60.90	Swiss francs	in 1921
51.45	"	" in 1922
43.80	"	" in 1923
374.35	"	" in 1924

{ Increase due to the change in classification of expenditure under the new system of book-keeping.

E. — PUBLICATIONS.

It has already been explained above that the cost of producing the publications is entered in a special account because of the particular interest which it bears in connection with the activity of the Bureau.

No publication was issued in 1921. The following table gives the amount expended during succeeding years and the publications for which they were so expended ;— (*)

[page 26]

Year.	Total Swiss Francs	PUBLICATIONS ISSUED
1922	1.189,05	Provisional Statutes ; Annual Report for 1921.
1923	6.497,60	Annual Report for 1922 ; Circular-Letter on Limits of Oceans ; Hydrographic Review N° 1 — Special Publication N° 1 — Definit Statutes.
1924	13.712,85	Annual Report for 1923 — Hydrographic Reviews N° 2 and 3 Special Publications N° 2 and 3.
1925	25.808,65	Annual Report for 1924 — Hydrographic Review N° 4 and 5 Special Publications N° 4, 5, 6, 6a, 7 and 8.
1926 to 1 st Sept.	33.925,05	Annual Report 1925 — Report of proceedings of the meeting of the Buoyage Committee, Monaco, November 1925 — Special Publications N° 8a, 9, 10, 11, 12, 13, 14, 15 and 16, 3 sets of Port and Coastal Signal Charts. —

REMARKS :

- I. — *The 17 charts of the various Buoyage systems, of Coastal signals and of Storm-warning signals kindly printed gratis for the Bureau by the U. S. Hydrographic Office are, naturally not included in the above figures.*
- II. — *It has not been found possible to give the cost of each separate publication for, in many cases, the printer's bills are very complicated and give inclusive figures referring to more than one publication.*

F. — FURNITURE AND INSTRUMENTS.

The heaviest expenditure for furniture was made, of course, in the early days ; such expenditure continued in later years as the staff was increased, but in a smaller degree ; finally, during the present year, a new set of offices having been rented, a considerable amount of furniture had to be purchased to furnish these to some extent ; as has already been said, only the strictly necessary items were bought on account of the near approach of the Conference.

The furniture includes typewriters, calculating and copying machines, as well as movable electric fittings (e. g. fans and desk-lamps), and, generally speaking, everything which is readily saleable.

The instruments under this sub-heading are the drawing and cartographic instruments required by the Bureau.

(*) *It has happened several times that the payment to the printer for a publication issued at the end of one year is not made until early in the following year. In the table such payment is included under the year of issue of the publication and not under that in which the actual payment was made.*

[page 26] Ever since the present method of book-keeping was instituted, the cost of furniture has always been entered in *Swiss francs* at the rate of exchange of the day when payment was made, in order to give it a definite value at once. In the previous accounts this was not done [page 27] and thus, in the following figures, the amounts expended in 1921, 1922 and 1923 have been converted into *Swiss francs* at the rate prevailing on 31st December of each year, whereas thereafter the figures are taken direct from the books:

Purchases amounted to:

2,580.10	Swiss francs in 1921
20,077.55	" " in 1922
5,333.90	" " in 1923
5,323.05	" " in 1924
2,745.50	" " in 1925

Total..... 36,060.10 " " to 31st December 1925.

The purchases made during 1926 (to 1st September) amounted to 1,407.05 *Swiss francs*.

Depreciation on Furniture. — The total of all sums expended for purchase of furniture since the establishment of the Bureau is shown on the Balance Sheet as an asset of the Bureau, but the furniture wears out and, some day, will have to be replaced, also the wear and tear reduces its selling value below its original price. Therefore, if the Balance Sheet is to give a true idea of the financial position of the Bureau, some account must be taken, on the opposite side of the Balance Sheet to that on which the purchase price of the furniture appears, of the amount of depreciation which the furniture has undergone since its purchase; this amount, entered on the Liabilities side of the Balance Sheet, reduces the capital of the Bureau to the extent of the depreciation. This is the object of the Depreciation Account.

The furniture it has been calculated will last, on an average, for 10 years — it may be taken that some will last much longer but others, for instance, typewriters, will not last so long; in any case it is better to assume rapid deterioration for in any case, this presents no disadvantages.

The Reserve Account increases, therefore, each year by 10 % of the total purchase value of the furniture at the end of the year. When the first Balance Sheet was drawn up for 31st December 1923, 25 % of the cost of the furniture at that date was entered as Depreciation, for the Bureau had been in existence for 2 ½ years.

The amounts entered in the Depreciation Account were:—

On 31 st December 1923:	6,987.90	being 25 % of	27,991.55	Swiss francs total cost.
" " " 1924:	3,331.45	" 10 % of	33,314.60	" " " "
" " " 1925:	3,606.00	" 10 % of	36,060.10	" " " "

Total Depreciation 13,935.35 *Swiss francs* on 31st December 1925.

[page 28] The Depreciation Account has been discussed here, although it is certainly not an expenditure, because it is more logical to examine it in connection with the furniture with which it is concerned.

G. — LIBRARY.

The remarks made with reference to the furniture, in connection with its value as an asset of the Bureau, apply to the Library, but with two differences: firstly, time does not cause books and particularly scientific books, to depreciate in value, in fact many such works increase considerably in value when the edition is out of print; complete sets of periodicals also have sometimes a value above their purchase prices — secondly, the great majority of books belonging to the Bureau consists of gifts; it would be difficult and, anyway, not befitting, to place a value on these gifts and to enter it in the accounts; these, therefore, show purchases only and thus the recorded value of the Library is far below its real value. It is these considerations which led to the non-creation of a depreciation account for the library as was done for the furniture.

However, as in the case of the furniture, the purchase price of the books is entered in the accounts in *Swiss francs* at the rate prevailing on the day of payment.

The amounts expended on the library were:—

983.70	Swiss francs in 1921
467.00	" " in 1922
1,826.10	" " in 1923
2,008.80	" " in 1924
1,935.90	" " in 1925

Total..... 7,221.50 " " to 31st December 1925.

DIFFERENCES ON EXCHANGE.

After the above discussion of the receipts and expenditure of the Bureau and before commencing the examination of the Balance Sheets, which will be the conclusion of the discussion, a few words of explanation are necessary with reference to the heading "Loss on Exchange" which appears in the statements of "Income and Expenditure" for the years 1924 and 1925 in the Annual Report for 1925. The sums were some 8,000 Swiss francs in 1924 and 19,500 Swiss francs in 1925 and the amounts thereof may, with good reason, cause some uneasiness.

In reality this loss (which might just as well be a gain) is partly real and partly fictitious and depends entirely on the fluctuations in rates of exchange over which the Bureau has no control. An example will make the matter more easily understood than any theoretical explanation:—

The Bureau requiring French money for Current Expenses gave orders to the Bank on 15th January 1925 to change 10,000 Swiss francs. At the moment the French franc was worth 27 Swiss centimes. In the books the Swiss franc deposit at the Bank was shown as reduced by 10,000 Swiss francs and the French deposit as increased by 37,037.05 French francs.

This French money lay at the Bank, at first in its entirety and then in part, for some days or weeks until used up; the French franc continued to fall in value meanwhile and thus the Bureau suffered a loss with reference to the monetary standard, the Swiss franc, and this is a real loss, for it represents a loss in purchasing power of the 37,000 French francs odd, or of what is left of them.

This money is used to meet current expenditure:— salaries, printing, etc. Each payment entails a reduction, in the books, of the French franc deposit and an entry, in the current expenditure, of a corresponding sum. The total number (37,037.05) of French francs remained the same but it was divided up amongst the various accounts, and so on until it was exhausted.

At the end of 1925 all accounts were closed; the French franc accounts, in which the 37,037.05 French francs appear, were brought into the Swiss franc accounts, i. e. the balance of each account was converted into Swiss francs at the rate on 31st December and applied to the balance of the corresponding Swiss franc account. But, since this sum had been used up, the French franc had continued to fall in value and on 31st December 1925 was worth 19.6 Swiss centimes only; thus the payments made out of this money diminished in value with reference to the Swiss standard from the moment when they were entered in the books. This constitutes another loss, entirely fictitious, for it is due only to the interplay of book-keeping entries, and it is in addition to the previously mentioned loss.

When converted into Swiss francs on 31st December, the 37,037.05 French francs appeared in the Swiss franc expenditure accounts as 7,259.25 Swiss francs only, whereas the Swiss franc deposit was reduced by 10,000 Swiss francs. The difference, i. e. 2,740.75 Swiss francs is the total of the two losses, the real and the fictitious. Had the French franc risen instead of fallen, a profit would have been shown.

In practice the inclusive algebraical total of all exchange differences is automatically registered at the end of the year by the balance of the *Exchange Accounts*, wherein are entered all operations which bring one currency into play with another.

It would be possible, if not to suppress them entirely, at least to reduce these differences to much smaller figures. For this purpose it would be necessary:—

- (1) To purchase unstable currencies in very small quantities, just sufficient to cover immediate requirements and on the very day when they arise, thus reducing to nearly nil the *real loss* due to depreciation of deposits.
- (2) To convert all sums expended, when entering them into the books, into Swiss francs at the rate of the day of payment, as is already done for the furniture and the library, thus eliminating the *fictitious loss*.

The first remedy would be somewhat difficult to apply strictly; it would give an enormous increase of work and entail very close attention, continual orders to the Bank, etc., but there is no doubt that this loss would be avoided, though, to date, *real losses* have not been great as the French franc deposit has always been kept small.

The second remedy would entail work three times as great as the present book-keeping work and this would mean that a special accountant would have to be provided; the only advantage gained would be to make the accounts somewhat more exact but it would in no way change the Balance Sheet for the loss on exchange thus suppressed would still appear in its entirety in the increase of the various expenditure accounts, which would thus be brought up to their true values.

The financial position of the Bureau shown by the Balance Sheet at the end of the year, not being affected by this fictitious loss, it does not appear that, under present conditions, there is any great advantage to be gained by applying this second remedy.

It might become necessary to apply it, however, if the French franc were to undergo a fall comparable to that of the German mark in 1923, for then the fictitious loss on exchange would become enormous, the expenditure accounts would fall to next to nothing and the financial statements would give an entirely wrong impression. In 1925 such fictitious loss already reached nearly 10 % of the expenditure and it will probably be more in 1926.

[page 31]

It should be noted that the figures given in the discussion of expenditure are also affected by these differences in exchange. In fact, they have mostly been obtained by conversion into Swiss francs at the rate at the end of the year, so that they appear less than they are in reality.

[page 32]

RECAPITULATORY STATEMENTS.

It appeared to be of interest to draw up, as from 1921, financial statements on the lines of those for 1924 and 1925 published in the Annual Report for 1925. Such statements are given below:—

A.) Statement of Income and Expenditure for the five years.

B.) Statement of Balance Sheets at 31st December of each year.

The Statement of Receipts and Payments, which also appears in the Annual Reports, would have been very difficult, if not impossible, to draw up and in any case, it would be but a statement of cash operations of no interest from the point of view of the financial administration and position; it has, therefore, been omitted.

In these two statements, the columns for the years 1921, 1922 and 1923 (except, of course, the Balance Sheet for 1923) were drawn up by using the figures for income and expenditure already given in this report; these figures were taken from the vouchers (bills, receipts, *etd.*) and not from the account-books of those years, this being the only way to show the expenditure under the present classification, which differs considerably from that previously employed. Thus it would be useless to attempt to find most of the figures given in the first Statement (A) for the first three years in the books and, as was stated at the beginning, these statements are in no wise intended for use in checking the book-keeping, their sole object being to present the various Income and Expenditure Accounts of the five years on a uniform basis.

The drawing up of these statements has, incidentally, shown the amount, during the early years, of loss on exchange, of excess of income over expenditure and of the capital of the Bureau, which were not given by the system of book-keeping in use at that time.

It will be noted that, in Statement A, certain figures in the expenditure for 1924 and 1925, as also the losses on exchange for these two years, are very different to those given in the Annual Report for 1925. This arises from the fact that certain expenditure, salaries mostly, was entered at its true value in Swiss francs, whereas in the books—and there was no other way of doing it—the equivalent sums were entered in French francs converted into Swiss francs on 31st December. This difference in the method of calculation has caused the greater part of the fictitious loss on exchange to disappear, for the reasons set out above, and thus reduced the loss on exchange considerably (from 19,000 francs to 1,600 francs in 1925).

It is obvious that the figures in these statements, with the fictitious losses thus extracted, are nearer the truth than those of the books.

An examination of these statements give a clear idea of the fluctuations in the various heads of income and expenditure, of the annual excess of income over expenditure and of the gradual growth of the capital of the Bureau.

Examination of the expenditure shows that this has been level or falling under many heads though actual requirements have really increased considerably from year to year. This is one effect of the fall in value of the French franc; it is entirely fictitious and is such that it will upset the Budget of the Bureau when it ceases and prices in France come up to world wide standard.

Nevertheless, the excess of income over expenditure, which was considerable during the first three years, has fallen very much during the last two; the figures are:—

76,681.00	Swiss francs excess in 1921
83,653.80	" " " in 1922
71,137.55	" " " in 1923
54,961.40	" " " in 1924
26,721.90	" " " in 1925

and it is almost certain that that for 1926 would be nil, or perhaps a negative value, even without the cost of the Conference; the year 1926, what with the Conference and the contingent travelling expenses for the Directors not re-elected and for those newly elected, will therefore show a big deficit.

It appears, therefore, that the present activities of the Bureau entail the complete absorption of its annual income and it is fortunate that the Bureau was able to accumulate the greater part (75 %) of its capital during the first three years of its existence.

This capital has been formed of the annual excesses of income over expenditure; its steady rise is clearly shown by the last line on the right of Statement B. It amounted on 31st December 1925 to more than the cost of one year's working; it is certainly sufficient to meet the cost of a Conference followed by the suppression of the Bureau, which is the most costly eventuality which has to be taken into account; thus there is no apparent necessity to increase it. Liquid assets, which are available immediately, amount to five-sixths of the capital which means

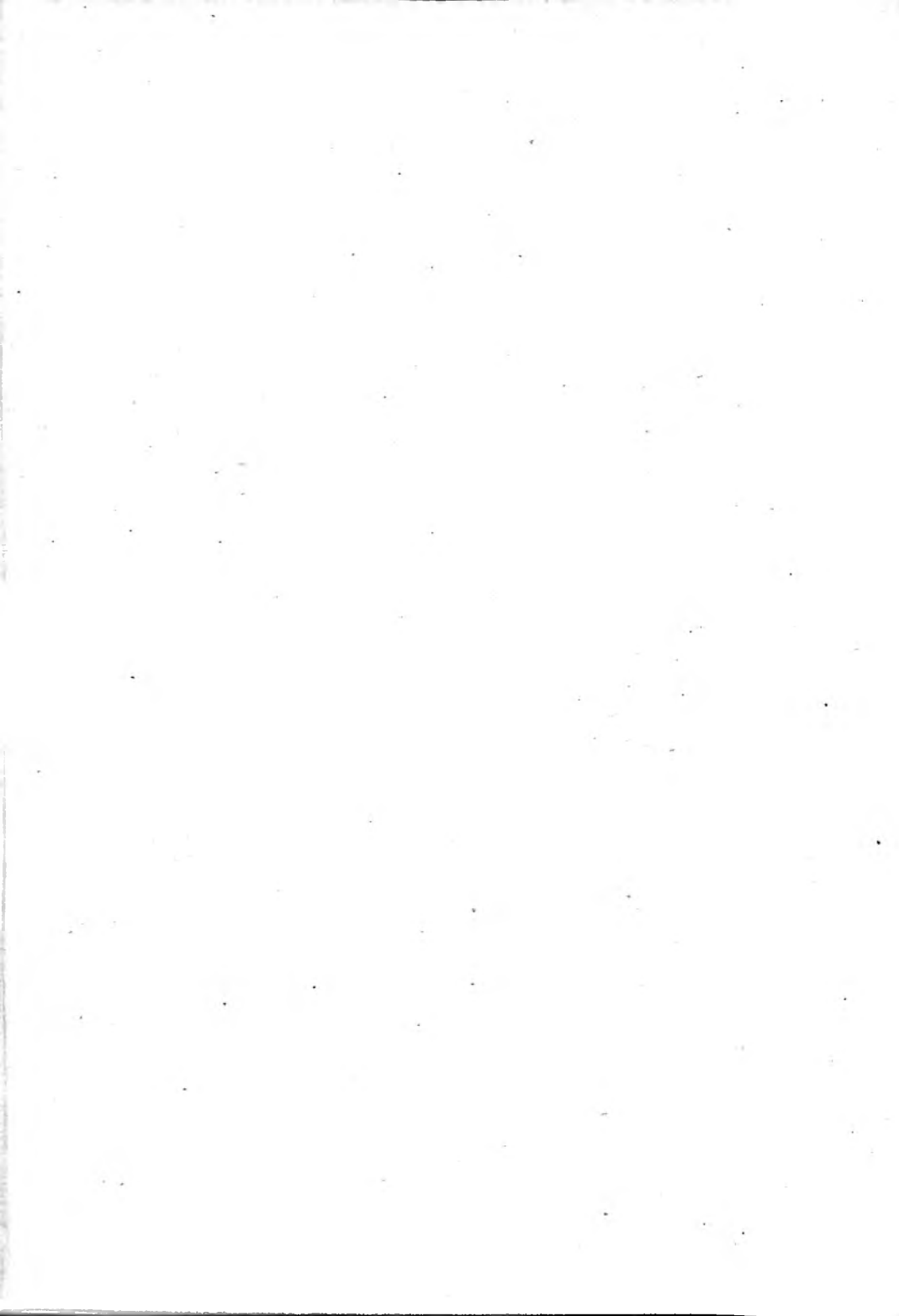
[page 34] — if the Bureau were suppressed and supposing that nothing were obtained by the sale of the furniture and of the library, that no outstanding contributions were paid in, *etc.* — that the total loss would not reach 17 % of the capital.

The financial position, as it now, appears may be summed up thus:—

— Annual income absorbed to the following extent:—

77 % in 1924
89 % in 1925
entirely in 1926.

— Reserve amply sufficient to meet all unforeseen circumstances and 83 % of it immediately available.



STATEMENT A.

COMPARATIVE TABLE OF INCOME AND EXPENDITURE
from 1921 to 1925

INCOME

EXPENDITURE

DETAILS OF INCOME	SWISS FRANCS.					DETAILS OF EXPENDITURE	SWISS FRANCS.				
	1921	1922	1923	1924	1925		1921	1922	1923	1924	1925
Contributions	203,658.05	236,000.00	236,000.00	236,000.00	228,000.00	a) Personnel :—					
(Statutory amount except for 1921 ; amount actually received for 1921).						I. Salaries.....	59,052.65	121,810.90	118,851.50	130,751.65	157,560.95
						II. Insurance	248.55	228.65	175.25	169.95	294.45
						III. Travelling expenditure.....	34,578.05	1,924.40	7,622.30	19,933.40	6,275.00
Contribution of Monaco.....	2,500.00	2,400.00	2,286.00	1,752.00	1,667.40	b) Offices :—					
(Converted into Swiss francs at the rate of January 1 st).						I. a ¹ Rent	3,361.15	4,392.25	3,734.60	3,494.70	2,548.00
						a ² Fitting up.....	14,582.50	6,203.90	2,269.55	—	911.40
						b Insurance	240.00	356.75	267.70	254.35	245.05
Sales of Publications	—	—	12.00	243.30	384.80	II. Maintenance.....	645.85	931.05	1,241.90	705.15	854.40
						III. Water, Light and Fuel.....	338.80	1,290.45	894.10	1,030.60	782.05
Interest from Bank.....	408.00	862.50	1,278.70	2,022.55	3,678.75	c) Working Expenditure :—					
						I. Stationery and Printing.....	1,421.20	2,765.55	3,100.00	3,484.40	2,782.20
						II. Post, Telegraph and Telephone ...	661.70	459.35	1,015.05	1,249.15	825.00
						III. Transport and Customs dues	1,050.20	385.40	377.10	330.15	120.05
						IV. Translations, Extracts	—	598.15	511.20	791.90	3,154.60
						d) Various Expenditure :—					
						I. a) Bank charges	37.95	58.65	4.40	8.00	9.85
						b) Bank insurance	—	—	888.10	1,460.25	1,507.65
						II. Entertainments and Visits	—	194.90	443.30	197.50	1,329.75
						III. Minor Expenses	60.90	51.45	43.80	374.35	306.20
						e) Publications	—	1,189.05	6,497.60	13,712.85	25,808.65
						Loss on exchange	13,595.55	12,777.85	20,499.70	7,108.10	1,693.80
						Excess of Income Over Expenditure :—					
						Invested in Furniture	2,580.10	20,077.55	5,333.90	5,323.05	2,745.50
						Invested in Books.....	983.70	467.00	1,826.10	2,008.80	1,935.90
						Invested in Depreciation Reserve.....	—	—	6,797.90	3,331.45	3,606.00
						Remaining available.....	73,117.20	63,109.25	57,179.65	44,298.10	18,434.50
Total	206,556.05	239,262.50	239,576.70	240,017.85	233,730.95	Total	206,556.05	239,262.50	239,576.70	240,017.85	233,730.95

STATEMENT B.

COMPARISON OF BALANCE SHEETS AS AT 31st DECEMBER
from 1921 to 1925

ASSETS.	SWISS FRANCS.					LIABILITIES.	SWISS FRANCS.				
	1921	1922	1923	1924	1 25		1921	1922	1923	1924	1925
OUTSTANDING CONTRIBUTIONS. (due and unpaid).	64,658.05	35,330.00	70,000.00	40,611.55	22,000.00	CONTRIBUTIONS PAID IN ADVANCE.	8,000.00	—	8,000.00	7,000.00	7,000.00
FURNITURE & INSTRUMENTS.... (purchase value).	2,580.10	22,657.65	27,991.55	33,314.60	36,060.10	DEPRECIATION ACCOUNT (on furniture).	—	—	6,997.90	10,329.35	13,935.35
LIBRARY..... (books purchased).	983.70	1,450.70	3,276.80	5,285.60	7,221.50	VARIOUS CREDITORS	—	—	—	3,836.40	11,032.95
VARIOUS DEBTORS	—	—	—	—	18,953.30						
CASH (Bank & Petty cash).	16,459.15	100,896.45	145,201.90	225,056.30	254,011.60						
TOTAL ASSETS.....	84,681.00	160,334.80	246,470.25	304,268.05	338,246.50	TOTAL LIABILITIES	8,000.00	—	14,997.90	21,165.75	32,028.30
						CAPITAL OF THE BUREAU..... (difference between assets and liabilities).	76,681.00	160,334.80	231,472.35	283,102.30	306,218.20

PART I.

D.

REPORT
ON THE
WORK DONE BY THE BUREAU
from JUNE 1921 to SEPTEMBER 1926
SUBMITTED TO THE CONFERENCE (*)

(*) NOTE. — *The original Report was distributed to the Hydrographic Offices before and to the Delegates during the Conference.*

It is considered necessary to give "in extenso" fairly lengthy extracts therefrom as this Report is the only complete summary of the work carried out since the creation of the Bureau until the meeting of the 2nd I. H. C.

The original paging is shown in the margin on account of the frequent references thereto adum in the discussions.

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A. — QUESTIONS REFERRED TO THE BUREAU
BY THE LONDON CONFERENCE 1919.

I. — DEFINED ZONES WITHIN WHICH CHARTS SHOULD BE
BASED ON THE SAME CONSTANTS.

RESOLUTION MADE UNDER SECTION I - D.

(see page 23 of Report of Proceedings. Discussion pages 82 & 83, par. 9-14). (*)

Defined zones within which charts should be based on the same constant.

It is agreed that it is very desirable that, for certain fixed zones, charts should be constructed on a certain fixed scale. The question appears difficult to solve; it is to be referred for study to the International Hydrographic Bureau when it is established.

CIRCULAR-LETTER No 32 of 1922.

The Directing Committee is of opinion that this is a question which concerns Hydrographic Offices only, is of no practical interest to navigators, and should be left to each Office to solve in accordance with its own requirements.

The principal difficulties met with in devising a system of this description are that:

.....

The Directing Committee decides, therefore, that no useful purpose would be served by attempting to find a general solution of the problem.

Summary of replies.

CHINA is unable to give any information on the subject.

DENMARK, FRANCE, GREAT BRITAIN, GREECE, JAPAN, the NETHERLANDS, SWEDEN and the U. S. of AMERICA (H. O.), agree with the conclusion of the Bureau.

II. — CONTOURS OF DEPTH.

RESOLUTION MADE UNDER SECTION I - E.

(see page 24 of Report of Proceedings. Discussion pages 95 & 96, par. 13-16)

Delineation of contours of depth. II.

It is agreed that it is desirable to adopt common symbols to indicate the contours of depths in charts produced by those nations using the metric system; it was found impossible to

(*) Refers to "Report of Proceedings" of London Conference, 1919.

arrive at an agreement as to the symbols to be used, and it was decided to refer the matter for discussion to the International Hydrographic Bureau when formed.

N. B. — Very little discussion on this subject took place at the Conference.

CIRCULAR-LETTER N° 32 of 1922.

It appears to the Directing Committee that the eventual universal adoption of the metric system is certain. It examined this matter primarily from the point of view of safety of navigation and the avoidance, as far as possible, of interference with existing systems and treated all other considerations as secondary. It now makes the following proposal as a step towards the standardisation of charts: —

METRIC DEPTH CONTOURS

Proposed uniform system.

	Mètres	
	1	.....
	2	.....
	3	.....
	4	.....
2 or 3 lines of dots.	5	.....
	6	.....
	7	.....
	8	.....
	9	.....
Distinctly longer and heavier pecks than 5m }	10	.....
	15	.....
	20	.....
	30	.....
	40	.....
Same as 5m. without dots.	50	.....
	100	.....100.....
Any form of lines with figures at suitable intervals. }	200	---200---
	300	—300—
		etc.

[page 101] Special consideration has been given to the 5 metre and 10 metre lines with the object of making them stand out clearly as being the "danger lines" for small and large vessels respectively.

The proposal to insert figures on the depth contours of 100 metres and above has been made, as the question of safety of navigation is not so important at these depths and the contours are used mostly for special purposes.

The Directing Committee has found this an extremely difficult question to solve, and fully realises that the above proposal involves considerable sacrifices, in the interests of uniformity, on the part of most of the States.

[page 10] CIRCULAR-LETTER N° 36 - H. of 1924.

The replies to the Bureau's Circular Letter N° 32 of 23rd September 1922, proposing a uniform system of metric depth contours for hydrographic charts, are herewith summarised and the result submitted to the States Members for their further consideration as no definite agreement seems to have been reached. In the opinion of the Bureau, the solution of the question should go over to the next Conference, but, meanwhile, further consideration of the subject should lead to more definite agreement in principle.

.....
(The answers received are not reproduced as the question was referred back to the I. H. B. by the Conference.)

[page 17]

III. — COMMON ABBREVIATIONS.

RESOLUTION MADE UNDER SECTION I - E.

(see page 26 of Report of Proceedings. Discussion pages 91 & 92, par. 15).

Universal adoption of common abbreviations.

"It is agreed that the question of the universal adoption of common abbreviations should be referred to the International Hydrographic Bureau, when formed, with a view to the internationalisation of Charts."

CIRCULAR-LETTER N° 32 of 1922.

The Directing Committee decided, after lengthy consideration, that the only means of solving this question is the adoption, for this purpose, of abbreviations of words belonging to one of the so-called "International Auxiliary Languages" but that this is impracticable under existing conditions.

Summary of replies.

FRANCE, GREAT BRITAIN, GREECE, JAPAN, the NETHERLANDS, SWEDEN and the U. S. OF AMERICA (H. O.) accept the decision of the Bureau.

FRANCE recommends that Esperanto shall be used.

SWEDEN suggests:

- 1° The publication of the Signs and Abbreviations used by all seafaring nations;
- 2° The fixing of letter type according to which abbreviations and different kinds of descriptions should be made.

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IV. — COLOUR OF LIGHT SECTORS.

RESOLUTION MADE UNDER SECTION I - F.

(see page 26 of Report of Proceedings. Discussion pages 93-95, par. 2-12).

Proposal to institute a Uniform Symbol to show the Colour of Light sectors.

"The proposal was not adopted on a show of hands, but it was decided that this question should be referred to the International Hydrographic Bureau, when formed, for discussion."

CIRCULAR-LETTER N° 40 of 1922.

The Directing Committee considered the objections made to the proposal put forward at the Conference in this connection, i. e. to indicate the colour of a light sector by a symbol shown on an arc between the limiting lines thereof.

[Page 19]

The principal objections raised were :

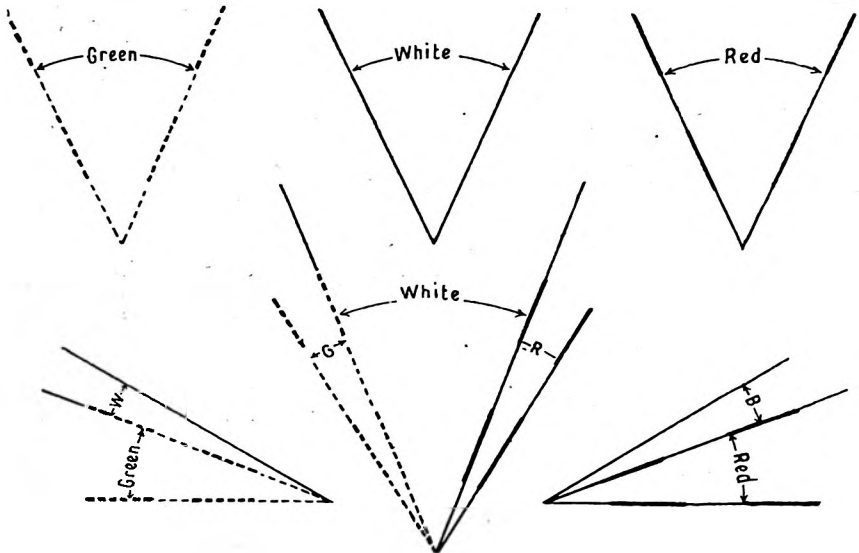
- (a) that the symbol on a curved line might be confused with the depth contours and
- (b) that some nations already used a symbol on the arc to indicate the character of the light.

The Directing Committee is of opinion that objection (a) can be met by using straight lines which do not in any way resemble depth contours and objection (b) by making the symbol on the limiting lines of the sectors instead of on the arcs and, therefore, puts forward the following opinion and suggestion.

The Directing Committee considers that the best method of showing the colours of light-sectors on charts is that of colouring them, but, as this practice is not possible in the case of certain countries, it proposes that the following symbols should be used on those charts where the sectors are not coloured and where the scale admits of so doing :

[page 20]

COLOURS OF LIGHT-SECTORS proposed uniform symbols.



As white lights are visible to greater distances than coloured lights, the limits of the white sector should, if possible, be produced beyond the limits of the coloured sectors when they are used in conjunction.

A legend should invariably be shown and this should be in the language used on the chart.

CIRCULAR-LETTER N° 15 - H. of 1923.

With reference to Circular-Letter N° 40 of 1922, I have the honour to inform you that the following Hydrographic Offices of the States Members :

CHILE.
DENMARK.
FRANCE.
GREECE.
ITALY.
JAPAN.

NETHERLANDS.
NORWAY.
SWEDEN.
U. S. A.

Hydrographic Office.
Coast & Geodetic Survey.

have expressed their opinions as to the proposal put forward by the Directing Committee on the subject.

[page 21]

2. The Committee, having carefully examined these opinions, instructs me to inform you that practically all of them are in agreement that the proposal is not generally acceptable on account of the very varying conditions under which coloured sectors are used, and that it is quite evident that no symbols can be devised to satisfy the requirements of all the Members.

[page 21]

3. The Committee therefore makes the following definite proposals :

- (a) That those States which can do so shall use colour on their charts to indicate the colours of the sectors of lights, as this method is practically perfect.
- (b) That on all charts, whether or not colour is used, the limits of the sectors shall be shown as fine lines, either full or pecked and ;
- (c) That in all cases the colours of the sectors shall be indicated, within the limiting lines, either by the complete words in the language of the State which publishes the chart or by the abbreviation adopted by it.

4. You are requested to inform the Bureau, at your earliest convenience, whether these proposals are acceptable to your Office.

Answers were received from ARGENTINE, BELGIUM, BRAZIL, China, FRANCE (Ponts et Chaussées), GREAT BRITAIN, PORTUGAL, and STAM.

The proposals were accepted by these States Members. GREAT BRITAIN made some amendments.

CIRCULAR-LETTER N° 30 - H. of 1924.

With reference to Circular Letter N° 15-H of 6th June 1923 I have the honour to inform you that the great majority of the States Members have agreed to the proposals put forward therein, i. e. : —

- (a) That those States which can do so shall use colour on their charts to indicate the colours of the sectors of lights, as this method is practically perfect.
- (b) That on all charts, whether or not colour is used, the limits of the sectors shall be shown as fine lines, either full or pecked, and
- (c) That in all cases the colours of the sectors shall be indicated, within the limiting lines, either by the complete words in the language of the State which publishes the chart or by the abbreviation adopted by it.

The Directing Committee instructs me therefore to announce that those proposals are adopted.

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V. — TRANSCRIPTION OF GEOGRAPHICAL NAMES.

RESOLUTION MADE UNDER I - P. III

(see page 29 of Report of Proceedings. Discussion pages 107-109, par. 26-31).

Transcription of names and authorities to be consulted thereon.

"It is agreed that, in the case of those countries using characters other than Roman, the International Hydrographic Bureau, when formed, should as soon as possible prepare an International System of transliteration and transcription of names."

CIRCULAR-LETTER N° 36 of 1922.

I am instructed by the Directing Committee to request you :

1. To inform the Bureau whether, in your State, any Government Department or Scientific Body is responsible generally for coastal nomenclature and the spelling thereof, and, if so,
2. to send to the Bureau the name and address thereof in order to facilitate the examination of the problem put before the Directing Committee by Resolution P. Section I, of the International Hydrographic Conference held in 1919.

The article in the Review Vol. II N° 1, pages, 33-37 gives the answers made to these questions.

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CIRCULAR-LETTER N° 19 - H. of 1925.

Roman transcription of Japanese place names. |

I have the honour to inform you that this Bureau has been requested by the Director of the Hydrographic Department of the Japanese Imperial Navy to bring to the notice of the States Members that the following alterations have been made in the system of Roman transliteration of the geographic names mentioned in the publications of this Department and that in consequence such names will appear under different transliterations in these publications for some time to come.

[page 24] *Syllables used in the old transliteration.*

Altered to :

Shi	Si
Sha	Sya
Shu	Syu
Sho	Syo
Chi	Ti
Tau	Tu
Cha	Tya
Chu	Tyu

Syllables used in the old transliteration.

Altered to :

Cho	Tyo
Fu	Hu
Di or Ji	Zi
Du	Zu
Ja or Dja	Zya
Ju or Dyu	Zyu
Jo or Dyo	Zyo

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VI. — COMPILATION OF LISTS OF LIGHTS.

RESOLUTION MADE UNDER SECTION III. - B. II.

(see page 33 of Report of Proceedings. Discussion page 127, par. 19-24).

A tabular method of compilation of Lists of Lights.

"That uniformity in arrangement is desirable. It is recognised that nations now publishing Light Lists have each adopted a form suitable to their respective requirements. It is recommended that, until a uniform arrangement has been advised by the International Bureau, nations which publish Light Lists irregularly or not at all should adopt one of the forms followed by one of the nations now publishing Light Lists of the World."

CIRCULAR-LETTER N° 40 of 1922.

The Directing Committee examined this question both from the view of utility and for the actual practice of the Associated States.

It proposes the following uniform tabular arrangement :

COLUMN.	SUBJECT.
1	Consecutive number.
2	Name of light or fog signal (with notation if unwatched).
3	Position <i>e. g.</i> End of West Mole.
4	Latitude and Longitude.
5	Number of Lights and Colour.
6	Type <i>e. g.</i> Flashing. Period & phases.
7	Power and Illuminant. (<i>a</i>)
8	Visibility.
9	Height of focal-plane. (<i>b</i>)
10	Building. } Height. Description.
11	Date established or changed.
12	Fog Signal. } Character. <i>e. g.</i> Bell. Period & phases.
13	Remarks (including description of sectors & period of exhibition, if not shown throughout the whole year).

- [page 25] (a) Attention is called to the following Note in Resolution Section III-B.
"A table showing the equivalent values of the units employed by the various nations with respect to the "Violle" should be shown in each volume."
(b) The datum from which this is measured should be indicated in every case.
Attention is called to Resolution Section III-J:
(It is desirable that heights of lights be given above mean sea level).

[page 26] CIRCULAR-LETTER N° 35 - H. of 1924.

I have the honour to inform you that the answers received from the Members with reference to the Uniform tabular arrangement for Lists of Lights proposed by the Directing Committee under VI in Circular-Letter N° 40 of 1922, show very wide divergence of opinion on the subject. Practically all of the Members desire to retain the tabular forms used by them at present.

2. The Directing Committee is of opinion that it has not been understood that the object of this proposal is to make the Lists of Lights legible to all seamen — even to those who are unable to understand the language in which the headings of the columns are printed — and thus mistakes will be avoided, e. g. a height of sixteen metres has been taken for a range of visibility of 16 miles.

3. The Committee feels constrained therefore to maintain the proposal which it has made, particularly as the table which was proposed appears to contain all necessary information, for in no case have additions thereto been proposed, though one or two Members do not consider it necessary to insert all of the columns suggested.

4. Should the Members still find the proposed tabular form unacceptable the Committee suggests that, as a method of avoiding the recurrence of the error alluded to above, the figure or figures indicating the Range of Visibility (or ranges, if more than one be shown) shall be printed in heavier type than are all other figures and that a note to this effect be inserted in the Preface or Explanations.

5. You are requested to inform the Bureau whether:

- (a) after this explanation you consider that a uniform tabular arrangement is desirable;
- (b) if not, will your Service adopt the proposal made in paragraph 4 of this letter.
i. e. to print the Range of Visibility in heavier type.

6. In any case the Committee suggests that should any of those Services, which do not as yet publish Lists of Lights, desire to commence such publication they should regard the Tabular Arrangement set forth in Circular-Letter N° 40 of 1922 as the standard.

Summary of replies.

5 (a) ARGENTINE, BELGIUM, CHILE, DENMARK, GREECE, JAPAN, NETHERLANDS, NORWAY, PORTUGAL, SIAM, SWEDEN and U. S. OF AMERICA (H. O. and Lighthouse Board) are in favour of the proposal, although a few nations propose slight modifications and NORWAY proposes to insert the graphic symbol showing the rhythm of the light and the fog signal in the Remarks; AUSTRALIA, CHINA, FRANCE, GREAT BRITAIN and ITALY do not agree.

5 (b) DENMARK and ITALY already follow the recommendation, BELGIUM, CHILE, CHINA, GREECE, JAPAN, NETHERLANDS, PORTUGAL and SWEDEN accept the proposal; ARGENTINE, FRANCE, GREAT BRITAIN, SIAM, U. S. OF AMERICA (H. O. and Lighthouse Board) reject it.

[page 29] VII. — VISIBILITY OF LIGHTS AND THE ADOPTION OF A FORMULA.

RESOLUTION MADE UNDER SECTION III - D.

(see page 34 of Report of Proceedings. Discussion pages 129 & 130, par. 3-8 inclusive).

Method of describing visibility as limited by the intensity of light and the adoption of a formula for its determination.

"As at present no formula is known which is sufficiently elastic to satisfy the various conditions of the atmosphere between the source of light and the point of observation, the observation

[page 30] method adopted by many nations appears to hold the field; in order to arrive at an unanimous solution, this matter should be referred to the International Hydrographic Bureau.

"In the mean time each nation may retain its own method, and it is considered desirable that observations should be made by each nation with a view to accumulating data for determining constants and developing relations to serve as a basis for an acceptable formula, and these observations should be sent to the International Hydrographic Bureau."

CIRCULAR-LETTER No 149 of 1921.

I am instructed by the Directing Committee to enquire whether the observations with reference to the visibility of lights which were suggested by the London Conference 1910 under Section III, Subsection D, have been or are being made. Should either be the case I am to request that the observations may be communicated to the Bureau as soon as convenient.

.....
Your attention is called to the fact that these observations do not reach their full value unless they cover a period of not less than one year.

It may be mentioned that the Bureau has received from the Hydrographic Office of the United Kingdom a complete set of such observations extending over a period of one year.

[page 30] CIRCULAR-LETTER No 39 of 1922.

With reference to the Resolution made by the International Hydrographic Conference 1919 under Section III. D, and my letter I. H. B. 149/21 of 10th October 1921, this question is now being studied by the Directing Committee.

2. After examining the observations of lights placed at its disposal by a few of the Associated States, the Directing Committee has decided that no satisfactory results can be obtained until it is able to collate and study a much greater number of observations, made in all parts of the world and under all climatic conditions, than it has received up to the present.

3. The necessary data have been received from:

DENMARK
FRANCE

GREAT BRITAIN
NETHERLANDS

4. It therefore solicits your help in obtaining such observations made off the coasts of your country, observing that records taken from Light-vessels and low off-lying islands are of the highest value as the lights are observed therefrom in a similar direction relative to the coast and from about the same height as they are generally sighted from ships.

The following articles and reports have been published:

(a) Visibility of Lights by Director Phaff. Review Vol. I No 1, pages 108-118.

(b) Report on Observations of Lights made in the United Kingdom, by Director Phaff. Special Publication No 2, Review Vol. I. No 2, pages 87-93.

(c) Report on the Visibility of Lights (ARGENTINE, BELGIUM, DENMARK and SWEDEN) by Technical Assistant Bencker. Special Publication No 7, Review Vol. III, No 1, pages 141 to 182.

The Bureau of Lighthouses of the U.S. OF AMERICA announced that observations made on the coasts and on the lakes are being sent to the Bureau.

An article on the Visibility of Lights by P. VAN BRAAM VAN VLOTEN, Engineer in Chief of the Lighthouse Service of the Netherlands, in Review Vol. I No 2, pages 94-112, appears to give the solution of the problem.

The local mean values for the constants of the formulae of ALLARD, BLONDEL & REY are deduced from observations made on the Netherlands Coast and this process is recommended for each coast separately, in order to get local data for the mean transparency of the atmosphere.

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VIII. — LIMITS OF OCEANS AND SEAS.

RESOLUTION, SECTION IV. — B.

(see page 36 of Report of Proceedings. Discussion page 144 par. 42 & 43)

"*Advisability of arranging Notices (to Mariners) geographically, to correspond with Sailing Directions and Light Lists.*"

[page 31] It is agreed that it is desirable that the limits of enclosed seas should be laid down, and that it might be stated to what sea or ocean a strait connecting two of them should be reckoned

CIRCULAR-LETTER N° 1 - H. of 1923.

OCEANS.

The Directing Committee decided that it is very necessary to define the limits of the Oceans before attempting to define those of the enclosed seas.

The following general limits of the Oceans are proposed: — (*)

.....
The Directing Committee would be obliged if you will cause the proposed limits of seas, and specially those in the neighbourhood of your country and its possessions, to be examined and requests that it may be informed, as soon as possible, of modifications of any sort which may appear to be necessary in order that these may be considered and that the Associated States may be notified without delay of any changes decided upon.

(*) *These limits are not reproduced here, the question being referred back to the I. H. B. by the Conference.*

[page 32] **Summary of replies.**

AUSTRALIA accepted the proposals;

U. S. Coast and Geodetic Survey and BELGIUM (Ponts et Chaussées) have no objection;

Answers including proposal amendments to the limits have been received from:

ARGENTINE, BELGIUM (Navy Department), CANADA, DENMARK, FINLAND, ITALY, JAPAN, NETHERLANDS, NORWAY, U. S. OF AMERICA (Hydrographic Office).

(The text of these amendments is not reproduced here, the question being referred for further study by the I. H. B.).

The Hydrographer of CHILE submitted the matter to his Government.

[page 33] **FRANCE.**

Suggests that the Bureau should study "Standardisation of the titles of the publications issued by the National Offices which publish Sailing Directions and Lists of Lights of the World (FRANCE, GERMANY, GREAT BRITAIN, U. S. OF AMERICA)". *

The question was to be brought up at the "Congrès des Sociétés Savantes" of 1924 but has not been discussed.

* *The Bureau decided that the question of the proposed Standardisation should be brought up at the next Conference.*

GREAT BRITAIN remarked:

The proposals of the Bureau are of much greater scope than is actually warranted by the Resolution of the International Hydrographic Conference of 1919.

The nomenclature and limits must serve all purposes, not hydrographical purposes only, and the issues involved would entail diplomatic action by the Government of the Nations involved.

Therefore the Hydrographic Department is unable to see its way to recommend the adoption of the proposals, considering that the theoretical advantages which they offer are slight and the practical disadvantages considerable.

[page 34] The Bureau is of opinion that some States Members have not kept sufficiently in mind that the main object in taking up the subject was to enable limits to be laid down *for hydrographic purposes only*; and that Archipelagos, Islands and Straits should be allocated as a whole to one Ocean or Sea.

At the same time, it is obvious that geographical limits should receive due attention and in no case should any consideration whatever be given to political boundaries and no political significance should be attached to any proposals forwarded by the Bureau.

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IX. — DISTANCE TABLES.

RESOLUTION MADE UNDER SECTION V - B.

(see page 39 of Report of Proceedings. Discussion page 153, par. 14-19 incl.)

Publication by each country of distance tables for its own Coast and the adoption of common points, where possible, to measure from.

"That countries which do not already publish Distance Tables for their own coasts should in future do so, including in such tables common points for the purpose of effecting connection with the coasts of adjoining countries.

"The selection and determination of the positions of such common points should be referred to the International Hydrographic Bureau."

Remark of the Bureau :

This matter still awaits a decision as to the limits of Oceans and Seas.

B. — RESEARCHES MADE BY THE BUREAU.

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X. — USE OF AIRCRAFT FOR HYDROGRAPHY.

(Annual Report, 1921, pages 16 et 17)

USE OF AIRCRAFT FOR HYDROGRAPHY.

The possibility of employing aircraft in hydrographic work has been raised by the receipt of reports of experiences gained in Norway and the Netherlands East Indies.

The Norwegian Hydrographer wrote recently to the effect that, during the course of the summer of 1921, experiments were made at the entrance of the Kristiania Fjord with a view to ascertaining the possibility of detecting shoals and submerged rocks by means of observation from aircraft.

Ascents were made in seaplanes and, in spite of the opacity of the water in this vicinity, the Hydrographer states that he obtained a comprehensive view of several shoals and submerged rocks up to depths of 5 to 6 metres (17 to 20 feet), under varying conditions of light, from heights of from 300 to 750 metres (985 to 2460 feet). He adds that the outlines of extensive shoals stood out quite distinctly.

In the Netherlands East Indies, a steamer having struck an uncharted rock and sunk, the surveying vessel "Van Gogh" was sent to search for this danger which was reported to lie North of the Gaspar Straits in about Latitude 1° 46' S, Longitude 107° 31' E. The conditions of wind and weather were favourable for seeing submerged reefs but, as the vessel had found no indication of the shoal after two days search, two seaplanes were sent to assist the "Van Gogh"

Within an hour of the commencement of the search by seaplane, one of these sighted the danger though the "Van Gogh" was anchored nearly 4 miles therefrom.

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The shoal was found to have a diameter of slightly over 100 metres and had 13 feet of water over it; from ships but little discolouration of the water was visible.

The Bureau hopes to examine this question later on, when further information on the subject is received.

CIRCULAR-LETTER N° 7 of 1922.

With reference to Section 7. C. of the Annual Report for 1921, "Use of Aircraft," I am instructed by the Directing Committee to request you to inform it whether any experience has been gained by your Hydrographic Service in this connection and if so, whether you will kindly forward to this Bureau a full report thereon.

Summary of replies.

BRAZIL, GREECE, U. S. OF AMERICA have applied the method but are not yet able to give an opinion on the subject.

CHILE reports that the rock Coronilla (chart N° 149 Lat. 33° 5' S., Long. 71° 8' W.) which had escaped all researches by sounding, was found in this way.

FRANCE. Aerial photography is now practically introduced in the French Hydrographic Service; it gave good results in 1919 during the Survey of Brest and in 1920, 1921 and 1923 on the coasts of France, Algeria and Morocco, of Indo-China.

ITALY. Experiments were made under favourable conditions of light and transparency of the atmosphere with an airship maintained at an altitude of 1600 m. with a divergency of no more than 10 to 12 m. and having no more tilt than 1°; three cameras, fitted to be exactly horizontal when the clinometer was at 0°, were put in action simultaneously.

The scale of the photos was 1:6670, the error at the end of a coastline of 5.5 km. was 13.2 m. and the triangulation deduced from the photos agreed with that produced topographically.

Experiments were made by the Military Geographical Institute with photos taken at an altitude of 2500 m.; a work, which would have required 60 days if it had been surveyed in the usual way, was finished in 10 days with the aid of these photos.

The linear and angular defects of the scale, and the distortion which resulted from a second series of experiments at the same altitude, could be corrected with the aid of the triangulation and the complete representation of details was excellent.

It was established that the most suitable proportion is to take photographs on twice the scale of that on which the chart is to be constructed.

SWEDEN. Experiments showed that on the West Coast the bottom was visible at a depth of 7 m. from an altitude of 500 to 1500 m. and under favourable conditions. In the Baltic, the possibility of detecting shoals by air photography is small; the procedure does not give satisfactory results with the apparatus available and the cost is considerable.

Photography with different coloured filters was to be tried.

The following articles have been published in Review
Vol. I, N° 1:

On the Employment of aerial photography in connection with Surveying by the Hydrographic Service of the French Navy, by Ingénieur Hydrographe Général ROLLER DE L'ISLE, Director, pages 73 to 87.

Summary of a report on trials of Aerial Photographic Mapping in the Netherlands by Captain J. L. H. LUYMES R. D. N., pages 88 to 107.

XI. — HARMONIC ANALYSIS OF TIDES.

CIRCULAR-LETTER N° 30 of 1922.

The Representative of one of the Associated States having expressed a desire for information as to the application of Harmonic Analysis of Tides, the Bureau has undertaken to hold an inquiry on the subject amongst its Members.

.....

[Page 55]

[Page 58] 11. — In order to ascertain the extent of use of Harmonic Analysis as applied to tides, the Bureau requests that the following questions may be answered :

[Page 59] . — Is harmonic analysis applied to tides in your country :

(a) in the Hydrographic Service for surveying, description of tides in sailing directions, and for tide tables, and by what system, machine or calculation, are the predictions made ?

(b) by the seamen for calculating the height of tide at ports which are not to be found in tide tables ?

II. — What are the principal manuals on the subject and what are the tables published in your country to facilitate the calculations ?

III. — What data for tides are given on the charts ?

IV. — Is harmonic analysis included in the courses of instruction on tides given in schools where officers of the Navy and Merchant Marine are educated ? What are the programmes of this course of instruction and which manuals and tables are used ?

The answers to this Circular-Letter have been published in the *Hydrographic Review*, Vol. II, No 1, pages 39-49.

CIRCULAR-LETTER No 20 - H. of 1924.

I have the honour to inform you that the Bureau is studying the question of the proposed uniform datum plane referred to as "*International Low Water*" (see Resolutions E. & F., Section VI, of the International Hydrographic Conference, London, 1919, page 41 of the Report of the Proceedings), and for this purpose it desires to obtain complete information as to the harmonic constants which have been calculated throughout the world.

2. I am instructed, therefore, to request you to supply to the Bureau a list of all such constants, including the value of Mean Sea level, as have been calculated for the tides on the coast of your country and its dependencies, together with any such constants which may have been calculated from observations made on other coasts.

The following articles have also been published :

International Low Water, by Director PHAFF, Special Publication No 5, Review Vol. II, No 2, pages 63-127 and

International Low Water, by Captain J.L.H. LUYMES, Special Publication No 10.

Investigation of Harmonic Constants, etc. by Director PHAFF, Special Publication No 12.

Tide Predicting Machines, by Technical Assistant BENCKER, Special Publication No 13.

[Page 60] Remarks of the Bureau.

The Secretary of the Section of Physical Oceanography, Union of Geodesy, of the International Research Council, communicated the following resolution passed at the first General Meeting of his organisation held at Paris in January 1921 :

"That it is desirable to enter into cordial relations with the International Hydrographic Bureau with a view to ascertaining what investigations on tides are required to satisfy the needs of navigation."

At the Meeting of the Tidal Committee of the International Research Council, held at Rome in May 1922, the question was brought up as to which indications should be given on the charts for diurnal and mixed tides. The Bureau saw no other way than the enumeration of the principal harmonic constants ; however this procedure has not yet been proposed because some States Members have not yet investigated these constants in sufficient numbers to make it efficient.

[The Bureau had considerable correspondence on the subject of tides with the Authorities concerned in CANADA, the EAST INDIAN ARCHIPELAGO (BATAVIA), FINLAND, FRANCE, GREAT BRITAIN and SWEDEN all of which have contributed in procuring data for the tidal works of the Bureau.

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XII. — PROGRESS OF HYDROGRAPHY.

CIRCULAR-LETTER No 43 of 1922.

With a view to the fulfilment of the requirements of Articles 8 and 9 of the Statutes (Articles 11 and 12 of Draft Revised Statutes) I am instructed by the Directing Committee to request you to forward to this Bureau information as to which coasts have been :

(a) fully surveyed ;

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- (b) partially surveyed ;
- (c) superficially examined

in your country and its possessions to the end of 1921.

2. The Board is of opinion that this information could best be given by marking the coasts by colour washes on an outline or other chart ; those under (a) by a red wash, those under (b) by a blue wash, those under (c) by a yellow wash.

3. When sending the annual Statement of work carried out you are requested to enclose a chart or chart giving the above information brought up to date.

[Page 62] Summary of replies.

No answers have been received from BELGIUM, PERU, SPAIN and the BRITISH DOMINIONS.

The other States Members have sent charts with their answers showing the information requested, or have promised to do so.

Data have been promised by CHILE and by PORTUGAL for its Colonies.

ARGENTINE. Part of the coast has not even been superficially surveyed and the Argentine Navy uses British Charts for these parts.

BRAZIL. The plans of the most important ports and the proximity of these have been fully surveyed, its islands have been surveyed only superficially.

SWEDEN. Added a pamphlet on the accuracy of its surveys with samples of charts of various periods.

FRANCE. Judging that charts which have been fully surveyed years ago are now no longer to be considered fully trustworthy, France has added the dates at which the surveys were made.

GREAT BRITAIN. Has also pointed out that modern requirements tend to depreciate the value of former surveys, especially on account of the present demand for large scale surveys supplemented by sweeping for dangers.

RUSSIA. Has been requested to send charts of its coasts marked as requested in the Circular-Letter.

The other Nations have given more or less detailed information about the charts sent, which are coloured according to the suggestion made in the Circular-Letter.

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XIII. — MANUAL OF SYMBOLS AND ABBREVIATIONS OF ALL NATIONS.

CIRCULAR-LETTER N° 46 of 1922.

1. It having been suggested that this Bureau is the proper authority for the publication of a "Manual of Symbols and Abbreviations used on Charts of all Nations", the Directing Committee has taken the matter into consideration and has decided to undertake this work.

2. I am instructed, therefore, to request you to forward to the Bureau, as soon as possible, a complete and up to date list of all conventional signs and symbols drawn on a scale suitable for clear reproduction, and also of the abbreviations used on the Charts published by your Office.

Note by the Bureau.

The photographic proofs of the Symbols and Abbreviations of 14 States have been sent to these State Members for approval and amendment by Letter N° 586/26-89/6 of 31 March 1926.

ARGENTINE, DENMARK, FRANCE, JAPAN, NETHERLANDS and NORWAY have already sent their answers and suggested changes and amendments.

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XIV. — COPPER PLATES FOR CHARTS. ENGRAVING AND REPAIR.

CIRCULAR-LETTER N° 49 of 1922.

With reference to Article 4 of the Statutes (Articles 7 of the Revised Statutes) of the Bureau I am instructed by the Directing Committee to request you to inform it whether your Office possesses any information on the following subjects :

- (a) the perfection of a satisfactory mechanical method for the execution of copper-plate engraving,
- (b) the effective repair of a cracked copper-plate, and
- (c) the permanent retention of copper inserted into a copper-plate where a hole may have become formed owing to excessive correction in one place.

2. The Directing Committee would be glad, if such information exists in your Office, if you will kindly supply it therewith in order that the methods employed may be published for the benefit of all Associated States.

The following articles have been published :

Charts, Plates, Engraving, Correction and Repair, giving the answers received to the above Circular-Letter, Review Vol. I, N° 2, pages 27 to 37.

Galvanoplastic precipitation of copper on engraved plates, by J. C. F. HOOFKAAS, Assistant Hydrographer of the Netherlands, Review Vol. II, N° 1, pages 123-127.

Engraving Copper Plates by Director NIBLACK, Review: Vol. II, N° 2, pages 39-56.

Note by the Bureau.

NORWAY informed the Bureau that a machine for stamping various details of charts on copper plates had been invented; but, the apparatus not having been constructed or used in current practice, the publication of details of this invention did not fall within the province of the Bureau.

[Page 67]

XV. — REPRODUCTION OF CHARTS.

The following letter was received from the Hydrographic Department of the Chinese Navy :

N° 135.

Woosung, 27th. November 1924.

SIR,

I have the honour to invite your attention to the Resolution passed under Section IX, par. D, at the International Hydrographic Conference, London 1919.

The question has arisen in this Department in connection with the reproduction of Chinese Government's charts of rivers and inland harbours by certain nationals of a foreign Nation who are unauthorized by this Hydrographic Department and, since these have become out of date, their reproduction has caused us great inconvenience and has been misleading mariners.

In China, most of the rivers and harbours are in a condition of rapid change, necessitating frequent readjustments in the positions of aids to navigation, etc.

Charts of these rivers and harbours, therefore, have to receive frequent corrections to maintain them as safe guides for navigators.

Nationals of a foreign Nation, who reproduce the Chinese Government's charts of rivers and inland harbours, are, in most cases, producing charts which have become out of date during the period that has elapsed between their leaving China and their receipt and reproduction in a foreign Country.

We realize that those who reproduce charts published by other Governments, do so to maintain continuity in their publication of a series of charts of the world, and which, from the

[Page 67] publisher's viewpoint, may be desirable. However, there is the navigator's viewpoint to be considered, which at once raises the question as to whether it is safe or worth while to reproduce charts of which it is known that they are liable to be no longer safe guides to navigators, owing to the probability of changes having occurred since the date of original publication of the chart.

As the provision contained in the Resolution in question does not appear to be an implied agreement that no citizen or subject of a foreign State or Nation is permitted to undertake such a work, we propose that Governments, who are Members of the International Hydrographic Union, observe reciprocally, as an international agreement, the privilege of copyright over such charts of their territorial waters, on substantially the same basis as that which is binding on their own citizens or subjects.

We should like to see that such a proposal, through the good offices of the International Hydrographic Union, is placed before the Associated State Members for their consideration, and to be informed of the result therefrom in due course.

I have the honour to be,

Sir,

Your obedient Servant,

(Signed) C. C. HSU,
Director.

[Page 68] to which the following answer was made:

I. H. B. 208/25-16/30.

MONACO, 11th. February 1926.

SIR,

I have the honour to inform you that Directing Committee of this Bureau has examined the question raised by your letter N° 135 of 27th November. 1924 and has instructed me to reply to that letter as follows:

- (a) The matter was dealt with by the International Hydrographic Conference, London 1919, and the following is the Resolution made thereon:

SECTION IX — RESOLUTION D.

The reproduction of charts and all other hydrographic publications of other countries.

That it is desirable that every Hydrographic Office should be free to reproduce, except in fac-simile, all publications of other Hydrographic Offices, provided that such reproduction shall have printed on it a due and proper acknowledgment of the original source from which it is derived.

- (b) The question will be included in the Agenda for the next International Hydrographic Conference (1926).

I have the honour to be,

Sir,

Your obedient Servant,
(Signed)

G. SPICER SIMSON,
Secretary-General.

[Page 69] XVI. — SYMBOLS : LEADER CABLES, WRECKS (SUBMERGED), WIRELESS AND RADIOGONIOMETRY.

CIRCULAR-LETTER N° 9 - H. of 1923.

I have the honour to inform you that I am instructed by the Directing Committee to call your attention to the fact that, in deciding on the conventional symbols to be used on charts, no Resolution was made by the I. H. C., London 1919, with reference to the following: —

- (a) *Leader cables.*

- (b) *Wrecks (submerged) over which the depth is known.*

2. — The subject of Leader cables was raised by the Hydrographic Office of the United States Navy and the Directing Committee, having examined various suggestions, proposes that the following symbol be adopted for general use: —

Two fine pecked lines 0.5 millimetre (0.02 inch) apart, each stroke being 3 mms. (0.12 inch) long and the interval between consecutive strokes being 1 mm. (0.04 inch). A suitable legend should follow the sinuosities of the double pecked lines.

[Page 69] 3. — The subject of submerged Wrecks over which the depth is known was raised by the Hydrographic Institute of the Royal Italian Navy.

4. — It appears that there is some variation in practice in this matter, and, with a view to the adoption of a uniform symbol, the Committee makes the following proposals:

For submerged wrecks over which the depth is known and where such depth exceeds 10 fms (18 metres):



For submerged wrecks over which the depth is known and where such depth exceeds 10 fms (18 metres): —

The word "Wreck", or its equivalent, under the sounding in lieu of the usual abbreviation showing the nature of the bottom.

N. B. — By Resolution E of Section 1, Wrecks, 1 (page 25 of the Report of Proceedings of the International Hydrographic Conference, 1919) it is agreed to insert the date of the wreck where possible.

[Page 70] You are requested to inform the Bureau at your earliest convenience whether these proposals are acceptable to your Office.

With reference to the proposals put forward by the Directing Committee in Circular-Letter No 9-H of 29th March 1923, I have the honour to inform you that all the Hydrographic Offices of the Members of this Bureau except those of BELGIUM, CHINA and JAPAN have expressed their opinions thereon. Doubtless, in the case of Japan, the non-receipt by the Bureau of an expression of opinion is due to the destruction of the Hydrographic Office.

(a) Leader cables.

(i) All the Offices which have answered have expressed approval of the proposal put forward in paragraph 2 of the Circular-Letter, with the exception of that of SWEDEN.

(ii) The Swedish Hydrographer fears that the proposed symbol is not distinct enough for his use and he considers that a red line might be used, with or without a black pecked line, to indicate the exact position of the cable (Cf. position of a light). However he adds: —

"If the double line is found to be convenient to most of the other States we will, of course, try to come into line although, without doubt, it will not be without difficulty".

The Committee desires to express its thanks to the Hydrographer for this contribution towards uniformity in charts.

(iii) Certain Members, while accepting the symbol, state that there may be some difficulty in keeping to the exact measurements laid down in the proposal.

(iv) It being obvious that the requirements of charts vary, it is not expected that these measurements will be rigidly adhered to in every case. The symbol inserted on charts should approximate as closely as possible to the description given in paragraph 2 of the Circular-Letter.

(v) Since this symbol has been accepted by so great a majority of the Members, the Committee declares it to have been adopted, subject to the modification mentioned in the preceding paragraph.

(b) Wrecks (submerged) over which the depth is known.

(i) All the Offices have approved of the symbols proposed in paragraph 4 of the Circular-Letter, with the exception of those of DENMARK and GREAT BRITAIN.

[Page 71] (ii) The Hydrographers of these two States inform the Bureau that no difference will be made in the symbol used, whatever be the depth over the wreck. The British practice is that laid down in Admiralty Notice to Mariners No 91 of 1923: —

WRECKS. UNIFORM SYSTEM FOR CORRECTION OF CHARTS.

(Former Notice, No 1066 of 1921, hereby cancelled)

With a view to establishing a uniform system for the correction of charts in regard to sunken wrecks, the undermentioned procedure has been adopted and is now being gradually introduced on the charts:

I. Wrecks known to, or liable to constitute a danger to surface navigation will continue to be shown on all Admiralty charts affected; such wrecks may be described as follows:

[Page 71]

- (a) Wrecks showing any portion of the hull or superstructure above low water.
- (b) Wrecks over which there is a depth of 10 fathoms (18 m. 3) or less, at low water.
- (c) Wrecks, the existence of which is authentic but of which no definite details are known, liable in consequence of the depth of water to constitute a danger to surface navigation.
- II. Wrecks, other than those described in I. above, will only be inserted on the largest scale. Admiralty chart embracing the position, provided that the depth of water does not exceed 100 fathoms (182 m. 9).
- III. Wrecks which lie in positions where the depths exceed 100 fathoms (182 m. 9) will not be shown on the Admiralty charts.
Note. — A cautionary note will be inserted on small scale charts to the effect that certain wrecks are not shown.
- IV. Doubtful wrecks will be marked on large scale charts with the note "E. D.", "P. D." or "P. A." signifying "Existence Doubtful", "Position Doubtful", or "Position Approximate", as necessary, in order to differentiate them from wrecks the particulars of which are authentically known.
- V. In conjunction with the foregoing system, wreck symbols in accordance with the decision of the International Hydrographic Conference, 1919, are now being introduced.
 The new wreck symbols are as follows, and refer to low water :
 (d) Wreck of which any portion of the hull or superstructure is visible above low water, thus :

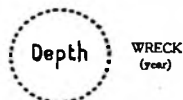


[Page 72]

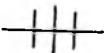
- (e) Wreck over which there is a depth of 10 fathoms (18 m. 3) or less, but over which the exact depth is unknown, thus :



- f) Wreck over which the exact depth is known (the depth is shown in feet or fathoms according to soundings on charts), thus :



- (g) Wreck over which there is a depth of more than 10 fathoms (18 m. 3) but over which the exact depth is unknown, thus :



The year date will be inserted on large scale charts only, in all cases where known.

In the case (d) the position of the wreck is indicated by a circle on the water line at the base of the mast, and in cases (e) and (g) by the intersection or the middle vertical line with the horizontal line.

The new system of wreck symbols described herein is to be employed henceforth in correcting the Admiralty charts from Notices to Mariners.

(iii) The Director of the U. S. Coast and Geodetic Survey, while raising no objection thereto, states that his Service would not use the symbols frequently as the least depth over a wreck is seldom known because tops of masts etc. are easily missed by the lead. He adds :

"Consequently, in waters where there is ample sea-room and where unrestricted wave action may result in changes of position, this Bureau (Coast and Geodetic Survey) considers it advisable to chart wrecks with deliberate indefiniteness which will compel mariners to give the obstruction a wide berth."

(iv) The Committee concurs in these remarks but does not consider that the depth over a wreck is known unless it has been visited by a diver or sweeping operations have been carried out; besides no navigator would approach a wreck unless, of course, this is unavoidable.

[Page 72] (v) The Director General of Navigation and Marine Fisheries of the Spanish Ministry of Marine suggested that the proposed symbol be adopted but that the limiting depth should be 20 metres and not 10 fathoms.

[Page 73] (vi) The Committee concurs in this suggestion and proposes that it be adopted by all those States which use the metric system on their charts. Those States which use fathoms and feet on their charts should use the 10 fathom limit pending the adoption of the metric system.

You are requested to inform the Committee, at your earliest convenience, whether this proposal is acceptable to your Office.

(vii) The Committee declares the symbols to be adopted.

NOTE: *Changes were introduced in various symbols during the 2nd International Hydrographic Conference.*

(c) Wireless and Radiogoniometry.

CIRCULAR-LETTER No 17 - H. of 1923.

The Directing Committee has ascertained, from correspondence received, that the symbols adopted by the International Hydrographic Conference, 1919, under Section I, E. *Wireless Symbols* (page 28 of the Report of Proceedings) do not give universal satisfaction as being neither very clear nor noticeable on certain charts.

2. — Owing to the rapidly increasing importance of the various types of Wireless Stations, to the increase in the number thereof, and the high value to Navigators of the knowledge of their exact positions, the Committee makes the following proposal:

A list of all Wireless Stations, shown on any chart, should appear thereon in the form of a table giving the following information as to each:

(a) Name.

(b) Type (i. e. whether radiogoniometric or not)

(N.B. — This could be shown by the Symbols approved by the I. H. C. 1919).

(c) Wave-length employed.

(d) Geographical co-ordinates.

3. — The Hydrographer of the Swedish Navy has proposed that those States which desire to do so should colour the position of the Wireless Station in a similar manner to the coloration of Lights.

The Committee is of opinion that there is no objection to this proposal and suggests that:

The positions of Wireless Stations may be coloured if the Office producing the charts on which they are shown desires to do so; where colour is used for this purpose it shall be *Violet*.

Summary of replies.

U. S. OF AMERICA (H. O.) concurs that the places of Radio Stations shall be coloured violet but objects to placing the full description in a special table on the chart for fear of encumbrance and correction; this description should be mentioned in the List of Lights.

XVII. — SOUNDING BY SWEEPING.

[Page 75]

CIRCULAR-LETTER No 12 - H. of 1923.

The Directing Committee instructs me, with reference to Art. 4 (c) of the Statutes (Art. 7 c) of the Draft Revised Statutes), to forward to you the following request:

2. — In spite of considerable progress in many other directions, the process of obtaining soundings whether by use of the lead, the sonic or some such other method still remains the basis of a modern hydrographic survey, and provided that the scales of the survey is sufficiently large, no other methods are necessary where sand or mud bottoms exist, but in the case of rock or coral formations, additional means must be brought into use to ensure that no dangers remain undiscovered.

3. — If meteorological conditions and the clearness of the sea permit, examination from the air is undoubtedly ideal for the discovery of the dangers referred to in the latter case, but failing the possibility of the utilisation of this method, the location of pinnacle rocks, coral heads etc. can be determined only by the use of a Wire-drag of some description or some other form of Sweeping apparatus.

[Page 75] 4. — The Wire-drag in its many forms and the various methods of usage thereof are so admirably described in the special publications of the U. S. Coast and Geodetic Survey that there appears to be little more to be said on the subject, but it is known that a variety of other form of Sweeping apparatus are in common use for hydrographic work, and the Committee therefore suggests that useful knowledge will be gained of the different methods in use by the Hydrographic Services of the States Members if they will kindly forward to the Bureau, for publication, any information which they may possess on this important subject.

Summary of replies.

ARGENTINE. Wire drag, such as described in the Special Publications of the U. S. of America, is now in course of construction.

FRANCE. Commenced in 1923 to systematically drag channels of the coast and is making experiments with various sorts of drags.

[Page 76] JAPAN. Investigations of sweeping have been undertaken since 1923.

SWEDEN. Sweeping is undertaken.

U. S. OF AMERICA (Coast & Geodetic Survey). Sweeping and wiredrag work has been undertaken for a number of years and the principal Special Publications on the subject are:

1915. Wiredrag work on the Atlantic Coast, N° 29.

1916. Wiredrag work in Alaska, N° 34.

1919. Construction and Operation of wiredrag N° 56.

Precise dead reckoning in offshore soundings N° 73.

Particulars of the subject are found in the Article: "Boat Sounding and examination of Shoals in Sweden", by Captain G. REINTUS, Hydrographer, in Review Vol. I. N° 2, pages 50-66,

XVIII. — ECHO SOUNDING.

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CIRCULAR-LETTER N° 34 - H. of 1922.

It being known that some experiments in sounding by echo are being carried out in France Great Britain and the United States of America, the Directing Committee has instructed me to invite those Associated States which have obtained any results by this method to communicate them to the Bureau with a view to the eventual publication thereof.

SUMMARY OF REPLIES.

Summary of replies.

DENMARK. Supplied a report on the BEHM Echolot installed on board a Beacon tender in 1923.

FRANCE. Supplied information about soundings between Marseille and Philippeville by M. l'Ingénieur Hydrographe MARTI in April 1922, and brought the Bureau in contact with the "Société de Condensation et d'Applications mécaniques" and Prof. LANGEVIN. The Société forwarded a brochure by M. MAURICE LEBLANC, and Prof. LANGEVIN kindly supplied the text of a lecture on the subject; besides the President of the Directing Committee of the Bureau paid a personal visit to the Professor and the Société.

U. S. OF AMERICA. Supplied the following information and results: Soundings taken during the crossing of the Atlantic by the U. S. S. *Stewart* from Newport to Gibraltar in June 1922, and those taken in the Mediterranean from Gibraltar to Port Said in the same year.

Bathymetric chart N° 5194 of the West Coast of U. S. from San Francisco to Point Decanso (Mexico) by U. S. S. *Hull* and *Corry* in November 1922.

The description of the Sonic Depthfinder type S E 1378 by Dr. Harvey G. Hayes.

Special Publication N° 107, "Radio Aconstic method of Positon Finding in Hydrographic Surveys", 1924, and

[Page 77] Special Publication No 108 "Velocity of sound in seawater", 1924.

The following articles have been published :

[Page 78] Echo Sounding, Test carried out by the U. S. S. *Stewart*,

Review Vol. I, No 1, pages 71 and 72.

Echo Sounding, by the President of the Directing Committee, Special Publication No 1.

Review Vol. I, No 2, pages 38-49 ;

Echo Sounding, by Technical Assistant BENCKER, special publication No 3.

Review Vol. II, No 1, pages 53-91 ;

Measuring Ocean Depths by Acoustical methods, by Technical Assistant BENCKER.

Special publication No 4, Review Vol. II, No 2, pages 135-192 ;

Velocity of propagation of Sound through seawater, by Technical Assistant

BENCKER, Review Vol. III No 1, pages 69-100.

Sounding by Echo, by Technical Assistant BENCKER, Special Publication No 14.

XIX. — ORIGINAL CHARTS.

[Page 79]

CIRCULAR-LETTER No 2 - H. of 1925.

I have the honour to inform you that, in accordance with Article 9 (a), (i), of the Statutes of the Bureau, the Directing Committee is desirous of ascertaining which of the charts now in use, published by each State, are *Original Charts*, i. e. those which are based on surveys made in any part of the world by or under the control of the Hydrographic Service of the State in question.

2. It appears to the Committee that this information can be readily supplied by placing a red cross, or similar mark, in the margin of the "Catalogue of Charts" opposite to the number or name of all Original Charts issued by the State which publishes the catalogue.

3. The Committee will be glad to receive such marked catalogues at your earliest convenience.

Summary of replies.

No answer was received from CHINA, EGYPT, FRANCE, and PERU.

The NETHERLANDS supplied an international catalogue of the Baltic with a list of signs and abbreviations shown on the charts mentioned.

An Article "The Use and Distribution of Original charts", by Captain J. L. H. LUYMES, Hydrographer of the Netherlands, followed by "Remarks" by the President of the Directing Committee, was published in Review Vol. I No 2, pages 121-128.

XX.— DISTURBANCE OF THE SURFACE OF THE SEA

CIRCULAR-LETTER N° 16 - of 1924.

I have the honour to inform you that as, a result of a request made by the British Meteorological Office and addressed to all Seamen, to suggest a satisfactory scale and code for recording and reporting the disturbance of the surface of the sea, the following proposal has been put forward by Captain H. P. DOUGLAS C. M. G., of the British Navy: —

SWELL.			SEA.									
HEIGHT.		LENGTH.	0	1	2	3	4	5	6	7	8	9
			Calm.	Smooth.	Slight.	Moderate.	Rough.	Very Rough.	High.	Very High.	Precipitous.	Confused.
Low.	0	None.	00	10	20	30	40	50	60	70	80	90
	1	Short or average.	01	11	21	31	41	51	61	71	81	91
	2	Long.	02	12	22	32	42	52	62	72	82	92
Moderate.	3	Short.	03	13	23	33	43	53	63	73	83	93
	4	Average.	04	14	24	34	44	54	64	74	84	94
	5	Long.	05	15	25	35	45	55	65	75	85	95
Heavy.	6	Short.	06	16	26	36	46	56	66	76	86	96
	7	Average.	07	17	27	37	47	57	67	77	87	97
	8	Long.	08	18	28	38	48	58	68	78	88	98
	9	Confused.	09	19	29	39	49	59	69	79	89	99

2. — The Director of the British Meteorological Office states the proposal appears to be very satisfactory and he adds:

"I should welcome the opinion of the States Members of the Bureau upon it. If the opinion is favourable the scale will be laid before the International Meteorological Committee for use in the international exchange of meteorological information."

3. — The Directing Committee of this Bureau concurs with the Director and, therefore, forwards the proposal to the States Members with a view to obtaining an early expression of the opinions of the competent authorities thereon.

Summary of replies.

ARGENTINE, BRAZIL, (Meteorological Office), CHILE, DENMARK (Meteorological Office), GREAT BRITAIN, GREECE, SIAM, and U. S. OF AMERICA consider scale and code satisfactory.

AUSTRALIA and the NETHERLANDS (both Meteorological Offices) think scale acceptable for log books, but not for telegrams from ships nor for the four five-figure group of the standard message of radio telegraphed weather report.

BELGIUM (Pons et Chaussées) and JAPAN propose to define the height and length of the swell by giving dimensions in metres. Japan thinks the system too complicated.

[page 82] Denmark considers it a drawback that sea cannot be separated from swell. Proposes amendments.

ITALY considers the code to be too complicated and fears more loss than profit from its introduction. Prefers old code abolished in 1920 and 1921 to which the direction of the swell is joined.

NORWAY (H. O.) and (Meteorological Office) think the present codes for weather telegrams quite sufficient for meteorological use.

CHINA, EGYPT, FRANCE, MONACO, Peru, PORTUGAL, SPAIN and SWEDEN have not yet answered.

These answers have been communicated to the Director of the Meteorological Office in London, to whom the scale and code were forwarded by Captain Douglas, R. N.; this Director intended to lay the scale before the International Meteorological Committee if the opinion of the States Members of the Bureau is favourable.

See Review Vol. II No 1, page 20; Vol. III No 1, page 21.

British Nature No 2866, Vol. 114 of Oct. 4th 1924 contains an article on a new method of investigating sea waves by Prof. WAS SHOLEJIKIN of the Technical High School of Moscow which however does not appear to meet the requirements of the seaman.

This article was presented to the Bureau which thought it might be of use to the H. O. of the U. S. of America for a projected scientific and Hydrographic expedition.

XXI.— TERMINOLOGY FOR SUBMARINE RELIEF

CIRCULAR-LETTER No 21 - H. of 1924.

The Bureau has received a suggestion from the Director of the Italian Hydrographic Institute proposing the adoption of standard terminology in the various languages for such submarine and topographical coastal features, as would be useful in the compilation of Sailing Directions on Charts. It appears to the Directing Committee, however, that the various countries should themselves select a word or words in their own languages which represent the feature described by means of standard definitions, and that any attempt on the part of the Bureau to undertake more than the drawing up of proposed definitions is undesirable, as it would create inevitably more uncertainties than it would prevent.

.....

831 5. The Directing Committee has now drawn up proposed definitions and has tentatively assigned English and French terms thereto, which terms are, of course, subject to revision by the States Members concerned.

6. The collated results are submitted to the States Members for suggestions, amendment or correction. It is proposed that the terms resulting from this examination of the question shall be adopted as the standard terminology for submarine relief for use in Hydrography.

.....

(Definitions are not reproduced here)

.....

The result in nomenclature is given in the following table.

TERMINOLOGY OF SUBMARINE

England. France.	Argentine.	Brazil.	Denmark.	Germany.	Italy.
I. — PRIMARY OR FIRST MAGNITUDE FORMS.					
1. — Forms of the Margins of the Ocean.					
A. - CONTINENTAL SHELF (1)..... (1) (Plateau Continental).	Planicie Continental	Planalto Continental	Fastlands- Sokkel *	Schelf Continental Rand	Piattaforma continentale
B. - CONTINENTAL TALUS..... (1) (Talus Continental).	Talud Continental		Fastlands- Affald *	—	Zoccolo continentale
C. - INSULAR SHELF (1)..... (Socle).	Planicie Insular	Sacco	- Sokkel *	—	Scarpa continentale
D. - INSULAR TALUS (1)..... (Talus Insulaire).	Talud Insular		- Affald *	—	Piattaforma insulare
					Zoccolo insu- lare
					Scarpa insul.
2. — Depressions in the Bottom of the High Seas.					
A. - BASIN..... (1) (Bassin).	Hoya a Hoyo	Bacia	Bassin or Bekken	Becken	Bacino
B. - TROUGH..... (1) (Dépression).	Hondonada	Depressao	Tordybning or Lavning	Mulde	Avvallamen- to Canale
C. - TRENCH..... (1) (Fossé).	Foso	Ravina	Rende	Graben	Fossa
D. - DEEP..... (1) (Fossó).	Fosa	Fossa	Dybeste Sted or Grub	Tiefe	Fondo abissa- le
3. — Elevations in the Bottom of the High Seas.					
A. - RISE..... (1) (Seuil).	Loma	Socalco	Bank or Haevning	Schwelle	Dorsale
B. - RIDGE..... (Dorsale).	Espinazo	Dorso	Ryg	Rücken	Dosso
C. - PLATEAU..... (1) (Plateau).	Meseta	Planalto	Plateau or Hojdedrag	Plateau	Platea
II. — SECONDARY OR SECOND MAGNITUDE FORMS.					
1. — Elevations.					
A. - CREST..... (1) (Crête).	Cresta	Crista	Kam	—	Cresta
B. - SHOAL..... (1) (Haut-fond).	Bajo	Baixo	Grund or Flak	Grund	Secca
C. - BANK (1)..... (1) (Banc).	Banco	Banco	Banke	Bank	Banco
D. - REEF (sugg. also <i>Sunken reef</i>)..... (1) (Récif).	Arrecife (several rocks) Piedra (one rock)	Recife	Rev.	Riff	Scoglio Scogliera
E. - PINNACLE..... (Aiguille).	Aguja	Agulha	Klippepsids	—	Cupola Guglia.
F. - SPUR..... (Eperon).	Cuna	Esporao	Udlober	—	Sprone
2. — Depressions.					
A. - CALDRON..... (1) (Gouffre).	Caldera	Caldeira	Hul	Kessel	Conca
B. - FURROW..... (Sillon).	Cano	Sulco	Fure	Furche	Solco
C. - VALLEY..... (1) (Vallée).	Valle	Valle	Dyb	Thal	Valle som- mersa

(*) DENMARK finds it unnecessary to have both Continental and Insular Shelf (Talus).

(*) Suggest different definitions, or alterations, or additions to same,

(*) U. STATES (C. & G. S.) suggest addition of the word "extensive"

RELIEF — CIRCULAR-LETTER N° 21 - H.

Japan.	Netherlands.	China.	Portugal.	Spain.	Sweden.	Norway.	U.S.A.	C.S.S. H. O.
Rikahō (1)	Vastelands- plat	Hai E	Planalto continentale	Planicie Continental	Kustplata	Fastlands-fot	Continental Shelf (1)	
Rikubōgai (1)	Vastelands- glooiing (1)	Hai Pi			Kontinental sluttning	Fastlands- hall.	Continental Talus	
Toho (1)	Insulair plat	Yen Tao Hai E	Socalco	Zocalo		Ö - fot.	Insular Shelf (1)	
Tōhōgai (1)	Insulaire glooiing (1)	Yen Tao Hai Pi				Ó - hallet	Insular Talus	
Kaibon	Bekken	Hai Pēn	Bacia	Hoya	Bassin	Bassin, Bek- ken	Basin	
Syūzyōkai- bon.	Trog	Hai Yao	Depressao	Hondonada	Djupranna	Insökk	Trough	
Kaikō	Slenk	Hai Hao	Ravina	Foso	Djup	Renne	Trench	
Kaien	Diep (1)	Hai Yūang	Fossa	Fosa	Djup	Dyp	Deep	
Kaibō	Welving of Drempe (1)	Hai Ti Ping P'o	Soleira	Loma	Rygg	Hevning Tersel	Rise	
Kairei	Rug	Hai Ti Chai P'o	Dorso	Espinazo	Troskel	Rygg	Ridge	
Kaidai	Plateau	Hai Ti Kao Yuan	Planalto	Mereta	Plata	Plåta Flak	Plateau (2)	
Kaiho	Kam (1)	An Fēng	Crista	Cresta	Kam	Kam	Crest	
Su (1)	Ondiepte (1)	Ch'ien T'an	Baixo	Bajo	Grund	Grunne	Shoal (1)	
Jai (1)	Bank (1)	An	Banco	Banco	Bank	Bank	Bank (1)	
Syō	Rif (1)	Chiao	Recife	Arrecife	Klipprev	Rev.	Reef	
Sensyo	Klip (1)	An Chiao	Agulha			Bergspiss, Undervands- tinn	Pinnacle	
Senko	Spoor	E Ling	Esporaο		Rygg	Utløper	Spur	
Kaihu	Ketel	Fu Hsing Ti	Caldeira	Caldera	Kitteldjup	Kjele.	Caldron	
Kaikyo	Voor	Ê Ch'ū	Sulco	Cano	Ranna	Fure	Furrow	
Kaikoku	Vallei	Ê Ku	Valle	Valle	Da!	Dal	Valley	

XXII. — NOTICES TO MARINERS

CIRCULAR-LETTER N° 1 - H. of 1924.

In accordance with the instructions of the Directing Committee I have the honour to submit for your consideration the following : —

Latterly various proposals with reference to the early announcement and the rapid dissemination of important notices affecting navigation have been put forward.

2. — There is no doubt but that these are very important questions and the Committee is anxious to obtain the opinions of all Hydrographic Offices thereon.

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9. — I am instructed to inform you that the Directing Committee puts forward the following remarks on this subject for the consideration of the Hydrographic Offices : —

(A) *The establishment of a uniform W/T Code.*

This appears to be most eminently desirable, and especially for the reason advanced by the Swedish Hydrographer, i. e. that congestion of W/T is likely to take place in the near future.

It is suggested that the "International Code of Signals", which is carried and understood by every vessel, should be utilised for this purpose, the W/T danger call (T T T) as at present being first used, and then followed by the Navigational warning prefix (N B A Z), as now used by the Netherlands.

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The use of the "International Signal Code" would decrease the difficulty occasioned by the warnings being sent *en clair* in any one language; it is possibly correct to assume that the majority of seamen understand the English language so far as navigational terms are concerned, but experience clearly shows how easily mistakes may occur when the meaning of a language other than one's own is in question, and the use of the Code, when possible, would largely reduce this disability.

(B) *The establishment of an Agent at certain ports for the reception and distribution of important navigational warnings.*

This proposal does not necessarily involve any large expense, as it would appear probable that some suitable Office connected with seamen already exists, but it certainly necessitates the setting up of machinery for the special purpose required at a certain number of the most important ports of call, and a permanent call on the services of some responsible person; a Pilot Service, if existent, would doubtless be an admirable establishment for promulgating purposes, as suggested by the French Hydrographer. Although it is true that the ultimate cost of establishment and up-keep of such an arrangement would not necessarily involve a large sum, nevertheless, it would be necessary to come to some conclusion as to defraying the expense; the very unequal amount of benefit that would be derived from this scheme by different nations would appear to be an obstacle to easy adjustment.

(C) *The promulgation of these important Notices at least two months in advance.*

The Directing Committee is of opinion that already everything is done in this respect which is reasonably possible; great improvements have recently been shown by all nations interested, and certain difficulties attendant on definitely exact advance notification must always remain; weather has often to be considered while unpunctual delivery of apparatus, the non completion of work in accordance with the contract, etc. may all tend to upset the original date as calculated; in any case, it appears impossible to lay down any period of advance notice which is to be firmly adhered to without exception.

11. — I am to add that the Committee would be glad to receive your observations on the above and any proposals which you may wish to make with a view to furthering the object aimed at.

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CIRCULAR-LETTER N° 26 - H. of 1924.

Circular-Letter N° 1-H, 25th January, 1924, on the subject of expediting the announcement of Notices of special importance to Navigation, was issued after the receipt of letters from the British Board of Trade and from the Representatives of France, the Netherlands and Sweden, calling the Bureau's attention to certain articles written by Lieutenant L. C. Carbin, Royal Netherlands Navy, and published in "De Zee" (Dutch) and the "Nautical Magazine" (British), and after correspondence on the subject with these and the British Representative.

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A Summary of the above correspondence will be found in this Circular-Letter, the conclusions of which are as follows: —

(A) *The establishment of a uniform W/T Code* is considered both desirable and feasible, and the suggestion for the utilisation of the "International Code of Signals" for W/T in connection with the promulgation of warnings affecting navigation should be adopted.

(B) *The establishment of an Agent at certain ports* for the reception and distribution of important Navigational warnings appears to be a practical proposition, although bringing it into effect in a satisfactory manner undoubtedly presents difficulties.

(C) *The Promulgation of important notices at least two months in advance.* The more exact definition of the advance period of notification of important warnings appears humanly impossible of fulfilment, although the special attention of the States Members is called to this important matter by the Bureau, with a view to every possible care in this respect being observed at all times.

Replies to the Circular-Letter have been received from the Representatives of Argentine, Belgium, France, Great Britain, Italy, the Netherlands, Norway, Portugal, Siam, Sweden, U. S. of America, and from the U. S. Lighthouse Board, and the opinions expressed are as follows: —

(A) *The establishment of a Special Code* is agreed to by Argentine, Belgium, France, Italy, the Netherlands, Portugal, Siam and Sweden.

The proposal was rejected by Great Britain, Norway and the U. S. of America, who prefer to give the Notice "en clair", the two latter pointing out the risk of a coded message being misunderstood.

The proposal to utilise the "International Code of Signals" was accepted by Argentine, Italy, the Netherlands and Sweden. Italy suggests the use of a special Code; the Netherlands point out that the "International Code of Signals" should be amended as necessary, and that the introduction of words instead of numbers for geographical names would be useful (Hydrographic Bulletin Washington N° 1804-1904); would also permit the use of optical signals; France proposes a special Code.

(B) France, the Netherlands, Siam and the U. S. of America agree as to sending Notices to Mariners to an Agent at ports of call abroad.

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France proposes that the consultation of these Notices should be made compulsory, that the fee to be paid therefor should be included in the cost of pilotage, that Captains of vessels should be entitled to telegraph important Notices free of cost, and that rewards should be given for Reports of a very important character. The Netherlands are of the opinion that expenses should be met by this Bureau; the U. S. of America do not agree to the payment of an Agent.

Belgium and Italy doubt whether the establishment of an Agent in a satisfactory manner is feasible.

Argentine, Great Britain, Norway, Portugal and Sweden reject the proposal concerning an Agent.

Argentine remarks that, as a rule, Steamship Companies telegraph important Notices to their own vessels abroad.

Great Britain, the Netherlands, Sweden and the U. S. of America already send their Notices to their Consular Offices abroad, at which Offices they may be consulted by the mariners of their own country.

Norway does not consider that the despatch of Notices to ports of call abroad would serve any useful purpose.

Portugal proposes to send Notices to Naval Authorities abroad for exhibition.

(C) Great Britain, Italy, Norway and Siam will take action to insure as far as possible, that ample notice is given prior to any alterations in their own aids to Navigation respectively.

Great Britain suggests that each nation individually should take the necessary action.

Argentine, France, the Netherlands, Sweden and the U. S. of America accept the suggestion to give notice, if possible two or three months beforehand; the U. S. Lighthouse Board publishes already intended changes from one to six months in advance, according to the importance of the subject. The Netherlands differ greatly from the opinion expressed by the Directing Committee of the Bureau in the original Circular-Letter that everything is already done in this respect which is reasonably possible.

Repeating these Notices twice a month was approved by Siam only. Sweden and the U. S. of America repeat them once a month, and Norway cannot do it more frequently as its Notices only appear monthly.

France proposes that, unless the Hydrographic Office concerned has notified a delay in execution, it should be notified on the pre-established date that the announced event has taken place.

Instead of issuing a repetition, the Netherlands propose to give, for each sea, a monthly Summary of the outstanding Temporary and Preliminary Notices.

Urgent Notices of unexpected changes in aids to Navigation, and to the putting into effect of previously announced changes are already given by W/T at fixed hours in nearly every country.

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Argentina will introduce this system as soon as possible; France proposes to repeat the Notices during a period of two months, if considered desirable; the Netherlands broadcast these daily after the Weather Report, and repeats them as long as is required; Sweden repeats them from three to seven consecutive days; the U. S. of America (H. O.) issues them twice daily on set schedules; the U. S. Lighthouse Board repeats them daily for a week and makes use of W/T for Notices which are of such urgency as to preclude publication sufficiently in advance.

In addition to the foregoing replies, France and the Netherlands propose, in order to prevent congestion in the air, that Navigational warnings by W/T shall be given by a limited number of Signal Stations only, and that a list of such Stations shall be published with every necessary detail.

France proposes also that National Notices shall be supplied to these Stations in order that they may be able to reply to questions concerning changes in Aids to Navigation which may be asked by ships bound for their coasts.

Finally, the Netherlands is most strongly of opinion that Notices should not only be issued daily, but that they should be distributed daily to other Hydrographic Offices.

REMARKS ON THE FOREGOING BY THE DIRECTING COMMITTEE.

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At the next International Hydrographic Conference, a Committee might be appointed to assume the task of drawing up proposed additions to the Code for submission to the *International Congress of Signaling*.

CONCLUSIONS.

The Directing Committee submits the following recommendations: —

1. That Notices to Mariners be issued and despatched DAILY BY LETTER POST, and not as ordinary Printed matter which is the practice in many countries.
2. That no time be lost between the receipt of the information respecting intended changes in aids to Navigation from the Superintending Authority, and the despatch of the Notice in which this information is inserted.
3. That this information be given, if feasible, two or three months in advance, and that it be repeated in the Notices as often as considered necessary.
4. That a Notice reporting the accomplishment of the event should be given on receipt of a report from the Hydrographic Office concerned only, and that reports from other sources be accepted with reserve.
5. That the issue of a frequent Summary of the outstanding Temporary and Preliminary Notices for each sea is desirable.
6. That every country giving information with reference to the whole world should send all Notices to its national Consular Offices in the principal ports abroad, and that these should be held at the disposal of Captains of vessels who desire to consult them.
7. That it is essential to make such consultation compulsory. Until this is effected the Representatives of the States Members should bring the question before their National Marine Boards and impress these Authorities with the importance of these consultations.
8. That Navigational warnings referring to accidental events be sent by telegraph to neighbouring Hydrographic Offices, and broadcasted after the Weather Report by W/T from Stations which cover limited areas outside pilotage waters.
9. That the warning be preceded by the signal T T T and the initials of the four words which mean in each language "National Notice to Mariners", as previously given herein.
10. That warnings be broadcasted as at present until a Table of such Signals has been inserted in the International Code of Signals.
11. That the information be repeated as often as is thought necessary by the national Hydrographic Office concerned.
12. That information requested by vessels as to changes in aids to Navigation be supplied by the Station covering the area designated.
13. That the next International Hydrographic Conference should appoint a Committee to draw up and propose the insertion of a suitable Table of Navigational Warnings in the International Code of Signals.

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EXPLANATORY NOTE.

Since the signal T T T has been accepted by an International Conference, it should precede the four initials which mean in each language "National Notice to Mariners".

Summary of replies.

Answers to this Circular Letter have been received from 8 States Members only.

1. Sending daily, weekly or occasional Notices to Mariners by post is thought to be too expensive; BRAZIL will ask its Government for the necessary funds.
2. BRAZIL, CHILE, CHINA, FRANCE, JAPAN, NETHERLAND and SWEDEN agree.

[page 106] 3. CHILE, CHINA, JAPAN, NETHERLANDS and SWEDEN agree. BRAZIL thinks the giving of information so long in advance difficult; FRANCE will inform the Services involved, but no repetition will be made.

4. BRAZIL, CHILE, NETHERLANDS and SWEDEN agree. FRANCE proposes different wording.

5. BRAZIL, NETHERLANDS and SWEDEN agree. CHILE and FRANCE will not issue these Notices.

6. BRAZIL, CHILE, CHINA, JAPAN, NETHERLANDS and SWEDEN agree. AUSTRALIA sends Notices to harbour masters of very important harbours only; FRANCE proposes different wording and that the Pilot services act as agents; NETHERLANDS prefer sending Notices to Mariners to a central office in each port, if such an Office happens to exist.

7. CHILE, NETHERLANDS and SWEDEN agree. BRAZIL will ask its Government for the necessary funds; FRANCE does not recommend this proceeding.

8. BRAZIL, JAPAN and SWEDEN agree. AUSTRALIA, CHILE, FRANCE and NETHERLANDS think broadcasting by W/T sufficient; FRANCE proposes different wording.

[page 107] 9. BRAZIL, CHILE, NETHERLANDS and SWEDEN agree. CHINA prefers to give the Notice "en plein"; FRANCE will continue to use T.T.T., adopted by the International Conference of London of 1914 and inserted in Art. 11 of the ensuing Convention.

10. AUSTRALIA, BRAZIL, CHILE, FRANCE, NETHERLANDS and SWEDEN agree. NETHERLANDS proposes extension of list of geographical names in the International Signal Code.

11. BRAZIL, CHILE, FRANCE, NETHERLANDS and SWEDEN agree.

12. BRAZIL, CHILE, NETHERLANDS and SWEDEN agree. FRANCE asks payment.

13. BRAZIL, CHILE and SWEDEN agree. FRANCE and NETHERLANDS suggest that the I.H.B. itself should draw up the table.

GREAT BRITAIN. The Board of Trade calls attention to the fact that available telegraphic navigational warnings of urgent nature are in addition always available at Customs Houses and with Pilot Authorities throughout Great Britain and North Ireland.

CIRCULAR-LETTER N° 10 - H. of 1925.

I am instructed by the Directing Committee to forward for your consideration a suggestion which the Belgian Association of Master Mariners has made to the Director General of the Administration de la Marine of Belgium and which he communicated to this Bureau.

2. The following is the substance of the suggestion: —

(Translation from the French text).

"We have the honour to inform you that our members have expressed the wish that "Notices to Mariners", which usually are issued in the form of pamphlets and also of loose sheets, be accompanied by easily detachable slips giving the number of the Notice and a short summary of the text concerning modifications introduced with reference to buoys, beacons, etc.

"These slips, printed in French and English, could be pasted — the French into the "Livre des Phares" — and the English into "The Lights & Tides of the World" and, consequently, should be of sizes suitable thereto."

3. The Director General states:

(Translation from the French text).

"The suggestion put forward by this Association appears to me to be of interest and, I believe, worthy of being considered."

[page 108] 4. The Directing Committee is in agreement, to a certain extent, with this statement but, in forwarding the suggestion to the Hydrographic Offices of the Members with a request for an expression of opinion as to the value and practicability thereof, directs their attention to the discussion on the form and the contents of Notices to Mariners and the languages in which they should be published, which took place at first meeting of Committee N° IV of the International Hydrographic Conference, London 1919 (see pages 139 et seq., Report of Proceedings).

Summary of replies.

Answers have been received from 11 States Members.

PORTUGAL only concurs with the proposed giving of slips in two languages. ARGENTINE, GREAT BRITAIN, GREECE, ITALY, NETHERLANDS, SPAIN, SWEDEN and the U.S. of AMERICA (H.O. and Bureau of Lighthouses) are opposed to giving them. FRANCE gives them in French for her own publications and objects to English. The greater number of nations print their Notices to Mariners on one side of the paper only, in order to allow of the insertion of the slips by the users themselves.

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XXIII.— SIGNALS (GENERAL)

CIRCULAR-LETTER N° 44 - H. of 1924.

I have the honour to inform you that I am instructed by the Directing Committee of this Bureau to communicate to you the following:

2. At the International Hydrographic Conference in London, in 1919, one of the subjects for discussion, Section III, L (page 16, Report of Proceedings), was that of the publication by each country in the List of Lights of:

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"Information other than that directly relating to lights, such as storm signals, tide signals, port signals, life saving stations, submarine bells sound-signals by W/T, direction-finding by W/T, sound ranging signals, etc.", and the following resolution on the subject was made under Section III, M (page 35, Report Proceedings):

"That the List of Lights should include all such aids as will enable the navigator to determine direction and distance. If any light station is equipped to furnish additional information useful to the Mariner, this should be included in a remarks columnne."

It will be noted that no provision was made for the insertion of this information in case the station which is equipped with any of these additional signals *etc.*, is not at or near a light.

3. Another subject to be discussed, Section V, A (page 19, Report of Proceedings) was the "Publication by each country of a list of time signals, time-zones, storm-signals, tide-signals, port-signals, life-saving stations, submarine bells, sound-signals by W/T, direction-finding by W/T, sound-ranging signals, etc."

and the resolutions adopted on this subject (page 39, Report of Proceedings) were:

I. "It is not considered necessary that a special volume should be published containing time-signals, time-zones, storm-signals, *etc.* Such information is already included either in the List of Lights or in Sailing Directions, or on the charts."

II. "It is agreed, that the British procedure with regard to the insertion of such information be adopted."

"Direction-finding by wireless telegraphy, sound-ranging signals, and other new matter of a similar description, should be included in the List of Lights."

4. It will be noted that the British procedure, as given in the List of subjects to be discussed under Section V, A (page 19, Report of Proceedings), was as follows:

British Procedure

Time-signals appear in the Lights Lists. Other signals, except the three last, also appear in the Light lists when in connection with a lighthouse, but otherwise are only described in the Sailing Directions.

Time-zones only appear on British Admiralty Chart D. 6.

Life-saving stations only appear in the Sailing Directions and on large scale plans.

Submarine bells when in connection with lighthouses or light-vessels are inserted in Lights Lists, otherwise in Sailing Directions only.

Sound-signals by W/T, direction-finding by W/T, and sound-ranging signals at present only appear in Notices to Mariners.

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5. In preparation for the next Conference, the Bureau desires to be informed as to the practice of each of the States Members in the particulars of the publication of such information and therefore requests that you will kindly supply information as to the practice in your country

6. In H. O. publication N° 87 of the Hydrographic Office of the United States of America (which is the American edition of the "International Code of Signals") Part III, of the book is devoted to:

- List of stations for the display of storm-warnings,
- Time-signals,
- Hydrographic information,
- Meteorological signals,
- Coast radio stations,
- Radio compass,
- Life-saving stations, *etc.*

7. The Bureau requests information also as to whether or not the International Code of

111] Signals is published in your country, and if so, by what department and in what language, and whether it contains any additional information such as that discussed at the International Hydrographic Conference in 1919.

CIRCULAR-LETTER No 4 - H. of 1925.

5. — In its study of the question of uniformity in Port Signals the Directing Committee became convinced that the International Code of Signals provides for most of the requirements, and is now awaiting with much interest the replies to Circular-Letter No 44-H of 20th December 1924. It is the intention of the Directing Committee to procure copies of all the editions in use of the International Code of Signals, which are published by the various countries of the world for comparison; the so-called International Code of Signals not being really international, for it was prepared by the British Board of Trade and merely adopted by certain nations each of which has made such alterations as it has considered desirable in its own edition of the code. It is, therefore, considered inevitable that an International Conference must be called to provide a truly international code approved by the Governments of the maritime countries. The Directing Committee is of the opinion that, when such International Code of Signals is adopted, this Bureau should have prepared and ready for publication a second and companion volume which should contain the information of importance to mariners, as outlined in Circular-Letter No 44-H of 1924, namely, lists of Stations at which Storm Warnings are displayed, Time Signals, Meteorological Signals, Direction-finding or Radio Compass Stations, Sound-Ranging Signal Stations, etc., etc.

112] **CIRCULAR-LETTER No 14 - H. of 1925.**

With reference to Circular-Letter No 44-H of 1924, I have the honour to inform you that the Directing Committee, being unaware in many cases to which particular Department of the Government to apply for information which it is very necessary for it to collect on the subject of the location of radio-compass stations (direction-finding by W/T), of sound-ranging and signal stations, etc., would esteem it a great favour if you would lay before the proper Authorities in your States the following question with the request that this Bureau be furnished, at their early convenience, with the following data: —

- (a) Latitude and Longitude, or exact positions of Radio-Compass or Direction Finding W/T Stations, and in what publication does a list thereof appear?
- (b) Latitude and Longitude, or exact positions of Coast Radio or W/T Signal Stations, and in what publication does a list thereof appear?
- (c) Latitude and Longitude, or exact positions of Stations for Sound Signals sent by radio (or W/T), and in what publication does a list thereof appear?
- (d) Latitude and Longitude, or exact positions of Sound-Ranging Stations using hydrophones, and in what publication does a list thereof appear?
- (e) Latitude and Longitude, or exact positions of Coastal Signal Stations using the International Code of flag and/or semaphore Signals, or special Codes, and in what publication does a list thereof appear?
- (f) Latitude and Longitude, or exact positions of Stations from which Storm Signals are shown and in what publication does a list thereof appear?

Summary of replies.

The following information has been received in answer to the questions put in these Circular Letters.

The various nations insert the signals mentioned in Column 1 in the following publications:

Column. 1	Chart.	Sailing Directions.	List of Lights.	Notices to Mariners.	List of W.T. Signals.	Special Publications.	International Code of Signals.
Storm-Warning Signals (1)	Denmark Netherlands Sweden (2)	Denmark France Japan Netherlands Sweden Denmark France Japan Netherlands Sweden Denmark Great Britain Japan Sweden Denmark Sweden	China Netherlands	Brazil	Great Britain Sweden	—	Italy Netherlands U. S. of America
Tide-Signal	Sweden		—	China	—	Great Britain (Tide Table)	—
Port Signal (4)	Sweden (2)		—	—	—	Cebu (occasionally)	—
Time Signal	Sweden (2) (4)		Italy Japan	—	Great Britain Sweden	Brazil (Annual of Observatory Rio de Janeiro) France (Publication No 2) Italy (Effemeridi)	—
Time "ones	—	—	France Italy Japan	—	—	Brazil (Annual Observatory) Rio de Janeiro Denmark (chart) France (chart) Great Britain (chart) Italy (Effemeridi) Japan (chart)	—
Sound Signal by W.T. Direction Finding by W.T.	Denmark Sweden	Denmark Sweden	Denmark Italy Japan	—	—	France (No 2) France (No 2)	—
Sound ranging Signals.	Denmark	Denmark	Denmark	—	Great Britain Sweden	—	—
Life saving Stations (3)	Denmark Netherlands Sweden	Denmark France Japan Netherlands Sweden Denmark Netherlands Sweden	Italy Italy	—	—	Great Britain (Board of Trade Report)	—
Submarine bell	Denmark Sweden	Denmark Sweden	Denmark Italy	—	—	France (No 2)	—

(1) See par. xxviii; (2) on plans only; (3) see par. xxvi; (4) Optical signals only; (5) See par. xxix.

[page 114] Besides, JAPAN gives signals about currents in its List of Lights and DENMARK gives signals regarding ice on charts in Sailing Directions and in the List of Lights, and signals regarding currents and light vessels in sailing directions and on charts.

See Special Publication No 15.

See comments on paragr. XXX, International CODE OF SIGNALS, which follows.

[page 115] XXIV. — DISTINGUISHING SIGNAL FOR SURVEYING VESSEL.

CIRCULAR-LETTER No 38 - H. of 1924.

I have the honour to inform you that the Directing Committee of the International Hydrographic Bureau has received a letter from the Hydrographer of the Greek Navy proposing the international adoption of a distinguishing signal for vessels when actually employed on hydrographic or oceanographic work.

2. — It sometimes happens that such vessels, during their operations, are compelled to interrupt their work and to alter course whilst they are sounding or dredging on a line of leading marks, or other line in order to manœuvre, in accordance with the Regulations for Preventing Collision at Sea, to avoid approaching vessels which are unaware of their occupation.

3. — The Hydrographer of the Greek Navy proposes that the distinguishing signal should be flag H of the International Code hoisted close up at the fore.

4. — In submitting this proposal to your criticism and for your suggestions, I am instructed also by the Directing Committee to request you to inform this Bureau whether your Service has already adopted any distinguishing signal for its hydrographic vessels during their operations, such as the distant signal of the International Code which denotes *ships not under control*, or the distant signal shown by *cable-vessels when laying or picking up cable*, or any other.

5. — The Directing Committee is of opinion that it would be better to select a distant signal rather than a flag signal, and that the adoption of a signal for this purpose would be of great advantage.

Summary of replies.

15 Nations have answered this Circular-Letter and there is a consensus of opinion as to the desirability of a signal to be displayed by a surveying vessel at work.

The paragraphs of the Regulations for preventing collisions at sea which refer to this case are the following :

4. — (a) A vessel which from any accident is not under command shall carry, at the same height as the white light mentioned in art 2 (a), where they can best be seen and, if a steam vessel, in lieu of that light, two red lights, in a vertical line, one over the other, not less than 6 feet apart, and of such a character as to be visible all round the horizon at a distance of at least two miles, and shall by day carry in a vertical line one over the other, not less than 6 feet apart, where they can best be seen, two black balls or shapes, each two feet in diameter.

(b) A vessel employed in laying or picking up a telegraph cable shall carry in the same position as the white light mentioned in art 2 (a) and, if a steam vessel, in lieu of that light, three lights in a vertical line one over the other, not less than 6 feet apart. The highest and lowest of these lights shall be red and the middle light shall be white and they shall be of such a character as to be visible all around the horizon, at a distance of at least two miles. By day, it shall carry in a vertical line, one over the other, not less than 6 feet apart, where they can best be seen, three shapes not less than two feet in diameter of which the highest and the lowest shall be globular in shape and red in colour and the middle one diamond in shape and white.

(d) The lights and shapes required to be shown by this article are to be taken by other vessels as signals that the vessel showing them is not under command and can not therefore get out of the way.

BELGIUM advocates the adoption of a provisional signal until the Regulations have been revised and amended; the NETHERLANDS are of opinion that no special signal is required as the Regulations meet the circumstances; NORWAY and the U. S. OF AMERICA (Coast and Geodetic Service) advocate a special sign; U. S. OF AMERICA (H. O.) recommends amendment of art. 4a of the above Regulations.

CHINA hesitates between a flag and shapes; ARGENTINE, AUSTRALIA, BRAZIL, DENMARK, FRANCE, GREAT BRITAIN, ITALY, JAPAN, PORTUGAL, SWEDEN and the U. S. OF AMERICA advocate the use of shapes; BRAZIL wants a letter H on each side of each funnel besides.

[page 116] The surveying vessels of ARGENTINE, BELGIUM, BRAZIL, CHINA, the NETHERLANDS, SWEDEN and U. S. OF AMERICA (H. O.) do not display any special signal.

[page 117] When dredging, sounding at great depths, towing a wire drag or similar apparatus, those of DENMARK, FRANCE, JAPAN and PORTUGAL carry the two black balls and the two red lights of a ship not under command (art. 4a), to which the French add signals of the International Code to indicate in which way they would like to be passed; those of AUSTRALIA, GREAT BRITAIN and ITALY show the three shapes and the three lights of a ship laying or picking up a telegraph cable (4b).

NORWEGIAN surveying vessels fly a special flag, and those of the U. S. OF AMERICA (Coast and Geodetic Survey) display a white diamond shape between two green balls by day and a white light between two green lights by night.

See Special Publication No 16, par. 10.

XXV. — BUOYAGE.

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RESOLUTION MADE UNDER "GENERAL REMARKS". I.

(See page 44 of Report of Proceedings.

Discussion page 114, par. 12; page 134, par. 40-43; and page 157, par. 34-36).

"The International Hydrographic Conference expressed the wish that the Governments of all countries should aim at uniformity with respect to buoyage and port signals".

Comment of the Bureau.

Buoyage has been discussed in the Conferences of the "Association Internationale Permanente des Congrès de Navigation" which has its seat in Brussels; amongst others in the XIIIth Conference, held in London in 1923.

In order not to duplicate the work of this Association, the Bureau requested in November 1924 to be informed whether it saw any objection to the Bureau taking this matter in hand and which measures had already been taken to realise uniformity.

The Association replied that the subject had been indeed brought up at the named Conference but only under the head "Communications", because the Conference has no material power of action and can only call its moral influence into play, which implies that it can enforce no resolutions on its States Members. It expressed the opinion that the convening of a special Conference to discuss the basis of uniformity in buoyage was desirable and that the initiative for such a conference could successfully be taken by the International Hydrographic Bureau without any risk of duplicating the work of the Association.

In consequence, the subject was taken up by this Bureau, and the following circular letter was issued:

CIRCULAR-LETTER No 3 - H. of 1924.

With reference to General Resolution I adopted by the International Hydrographic Conference, London 1919 (see page 44 of the Report of Proceedings), I am instructed by the Directing Committee to submit the following for your consideration: —

[page 120] 2. — The Committee is now about to take up the study of the systems of Buoyage and Port Signals actually in use throughout the world with a view to making some proposals tending to the standardisation thereof.

3. — It is to be noted that, in some of the more important maritime States, there is at present no generally adopted system of Port Signals.

4. — Before drawing up any such proposals the Committee desires to ascertain whether your Government would be prepared to consider the adoption of universal systems of Buoyage and Port Signals and, if it is, it would welcome any suggestions or advice which you may wish to put forward in this connection.

[page 120] Summary of replies.

13 Nations were in favour of a uniform system of Buoyage and also of Port signals.

DENMARK accepts the discussion of these systems, provided agreement is reached with the other Baltic countries.

GREAT BRITAIN states that the buoyage system of the United Kingdom has given satisfaction during 40 years, that the difficulties of general uniformisation of buoyage are obvious, that it would therefore appear unlikely to be very profitable for the subject to be further pursued, and that it seems questionable whether the convening of an International Conference is justified.

NORWAY cannot consider essential alterations in its buoyage system in the near future but is willing to standardise port signals.

CIRCULAR-LETTER No 34 - H. of 1924.

I have the honour to inform you that the Directing Committee has examined the replies received from the Members with reference to the proposal to raise the question of the adoption of uniform systems of Buoyage and Port Signals (Circular-Letter No 3-H of 1924).

2. — These answers show that the great majority of the Governments of the Members are in favour of establishing such uniformity and, to a large number of the answers received, is appended the suggestion that a Conference should be called to deal with this subject.

3. — The convening of such a Conference would take some considerable time and the Directing Committee therefore proposes that the question of the establishment of uniform systems be discussed at the next International Hydrographic Conference, and it will appear on the Agenda thereof.

[page 121] Summary of replies.

THE NETHERLANDS propose to convene a Conference as soon as the results of the correspondence permit.

PORTUGAL informs the Bureau that it has adopted the Petrograd buoyage system.

Comment of the Bureau.

In November 1924, the "Technical Committee of Buoyage and Lighting", a sub-commission of the "Sub-commission of Ports and Maritime Navigation of the Consultative and Technical Commission of Communications and Transit" of the League of Nations held a meeting in Paris, at which were present representatives of CHILE, FINLAND, FRANCE, ITALY, JAPAN, NETHERLANDS and SWEDEN. The Bureau offered to collaborate with this Committee and to hand over the data which it possessed on the subject.

This collaboration was accepted and correspondence resulted in a meeting at Monaco, in February 1925, between the Directing Committee of the Bureau and Mr. HAAS, Secretary General of the Consultative and Technical Commission of Communications and Transit of the League of Nations, Mr. WATIER, Engineer of Public Works, Director of the Navigable Waterways and Ports in France, who had presided over the meeting in Paris, and Mr. DE ROUVILLE, Chief Engineer of the Central Service of Lighthouses and Buoyage in France.

It was decided at this meeting that a Conference on the subject should be convened at Monaco, in November 1925, by the Commission of Communications and Transit and the Directing Committee of the Bureau. This Conference should be international if possible, but it should be but preliminary, should make proposals only, and adopt no resolutions.

Since then, the Bureau has received copies of the Proceedings of the Paris meeting of November 1924 and those of a meeting held in March 1925 at Stockholm by the representatives of DENMARK, FINLAND, NORWAY and SWEDEN. It was informed also that the French Hydrographic Commission had considered the question.

The Buoyage and Buoy lighting systems of the world have been tabulated from the data given in the Sailing Directions, and this tabulation has been published by the U.S. Hydrographic Office as supplements to its Pilot charts.

CIRCULAR-LETTER No 4 - H. of 1925.

By Circular-Letter No 34-H of 27th September, 1924, the States Members were informed of the intention of the Directing Committee of this Bureau to bring up the question of uniformity in Buoyage and Buoy Lighting for discussion at the next Agenda thereof. In furtherance of this intention the Directing Committee has arranged with the Hydrographic Office of the U.S. Navy Department, Washington, to publish on the backs of its monthly pilot charts of the various oceans, beginning with the issues of May, 1925, a "Tabulation of the Buoyage and Buoy Light-

[page 122] ting Systems of the World ", compiled from the latest information available to the International Hydrographic Bureau. Owing to this generous action of the U. S. Hydrographic Office and to his particular method of publication, it will reach wide circulation amongst seafaring people.

2. — The Bureau is compiling also summaries of the proposals, discussions and conclusions of the various international assemblages which have dealt with the question of uniformity in systems of buoyage and, later, will refer these summaries to the States Members for their consideration, together with the Tabulation being prepared, as stated above, by the U. S. Hydrographic Office.

3. — It is recognised that the delegates attending any International Conference, convened for the purpose of obtaining further uniformity in the systems of buoyage and buoy lighting, should include the technical experts of the various countries in whose hands rest the design, construction and upkeep of existing systems, but the Bureau, from the data at hand, considers that already there exists a greater degree of uniformity than is generally believed and it does not appear that the concessions necessary to be made by the comparatively small minority to bring existing systems into general agreement are either very expensive financially or very radical in character. The Directing Committee fears that, with such an important question to be discussed at the next International Hydrographic Conference in 1926, there would be an undue amount of time absorbed by it to the exclusion of other important questions on the Agenda, and is considering whether a special Conference on the question of Buoyage and Buoy Lighting should be called separate from the International Hydrographic Conference itself; it is, however, the intention of the Directing Committee to endeavour to procure such preliminary agreements as many determine this question.

[page 123] 4. — A sub-Commission on Ports and Maritime Navigation of the Consultative and Technical Commission of the League of Nations on the subject of Communications and Transit met in London in July 1924, and this sub-Commission appointed a committee to consider the question of uniformity in buoyage and buoy lighting, which held informal meetings in Paris in November and December 1924, and is now in close co-operation with this Bureau. It intends to hold a more representative meeting, under the auspices of the League of Nations, at Monaco, in November 1925, in order that it may avail itself of the data which this Bureau has at its disposal and at which meeting this Bureau will be represented in a technical capacity without committing the States Members in any way. The States Members will be informed of any proposals or recommendations which may result from this meeting. Of course the initiative for calling a special International Conference to consider uniformity in buoyage and buoy lighting rests with the States Members of this Bureau, but should such step be decided upon, it must be clearly realised that the Bureau must work under the auspices of and in co-operation with the League of Nations and that other States besides its Members would probably be invited to participate. Should it be decided however to consider the matter in the Agenda of the regular International Hydrographic Conference in 1926, the question of representation of other States would rest with the Members (Article 52 (b) of the Statutes, 1923).

CIRCULAR-LETTER No 6 - H. of 1925.

The Directing Committee, being unaware in many cases to which particular Department of the Government to apply for information which it is very necessary for it to collect on the question of Buoyage & Buoy Lighting, would esteem it a great favour if you would lay this matter before the proper Authorities in your State with a request that the Bureau be furnished, at their early convenience, with the following data: —

I. Unlighted Buoys.

List (a) Number of buoys actually in position for navigational purposes.

List (b) Spare buoys on hand for replacement for any purpose.

Note: Each List should be subdivided so as to show of the following characteristics separately: —

1. Conical,
2. Cylindrical,
3. Spherical,
4. Spar,
5. Bell,
6. Whistling,
7. Special types,
8. Wreck or Obstruction,
9. Submarine Bell.

II. Lighted Buoys.

List (a) Number of buoys actually in position for navigational purposes.

List (b) Spare buoys on hand for replacement for any purpose.

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Note : Please state in each case the colour of the light which the buoy displays.

Each List should be subdivided so as to show buoys with the following characteristics separately : —

1. Conical,
2. Cylindrical,
3. Spherical,
4. Spar,
5. Bell,
6. Whistling,
7. Special types,
8. Wreck or Obstruction,
9. Submarine Bell.

III. Light Ships.

List (a) Number of Light Ships actually in position.

List (b) Number of spare or relief Light Ships.

2. Attention is invited to the fact that, in any International Conference in which uniformity in Buoyage and Buoy Lighting is considered, these data, for each country, will be of great value and should be available for such Conference.

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CIRCULAR-LETTER N° 20 - H. of 1925.

I have the honour to forward herewith, by registered post, copies of Special Publication N°6 "*Summary of Data on Uniformity in Buoyage & Buoy Lighting*", in which the proposals, discussions and conclusions of the various International Conferences on Uniformity in Buoyage & Buoy Lighting, and data relative to existing systems, are set forth. Included also are series of three charts each of the tabulation of the "Buoyage & Buoy Lighting Systems of the World" (*). Two copies of each of the above are intended for your Office, and it is requested that the other copies be forwarded to the Buoyage Authorities of your Government.

2. A preliminary Conference is to be convened at Monaco in November next, under the auspices of the League of Nations and with the participation of the International Hydrographic Bureau, on the subject of Uniformity in Buoyage & Port Signals; this Bureau will subsequently report to the States Members the recommendations of the said Conference. Meanwhile it will continue to collate : —

- (a) supplementary data as to the numbers of buoys and light vessels which each country possesses, (reply to Circular-Letter N° 6-H of 1925);
- (b) corrections, errors or changes in the tabulation given in the series of charts on Buoys & Buoy Lighting, and
- (c) a tabulation of Coastal & Port Signals in use in the various countries of the world,

with a view to laying before the States Members the necessary information on which to base a proposal for the calling of an International Conference on Buoyage & Port Signals, under the auspices of this Bureau, in 1926, at Monaco.

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The above mentioned Conference was opened on Nov. 3rd 1925 at Monaco. Preliminary correspondence is found in Special Publication N° 6a and copies of this report of Proceedings together with questions drawn up by the Bureau to be asked of seafaring organisations and individuals with regard to colours of lateral and channel buoys and of their lights, were sent to the States Members by Circular Letter N° 27 H. of 1925.

CIRCULAR-LETTER N° 17 - H. of 1926.

I have the honour to forward by registered post, the revision of the tabulation of the *Buoyage and Buoy Lighting Systems of the World*, recently made in this Bureau and printed gratuitously by the Hydrographic Office of the Navy Department, Washington, D.C. The original tabulation was issued with Circular-Letter N° 20 - H, 27th August 1925, and it was made from latest published data available for all seamen in Sailing Directions or other publications. It is a severe indictment of the methods of informing mariners of the existing buoyage system that so many corrections, additions and amendments should have to be made in this new edition, considering that the sole reason for the existence of the buoyage is its use by mariners. In other words, not only are there many different systems of buoyage, beacons and buoy lighting, but much information is not available to those for whose benefit they primarily exist.

(*) *Note by the Bureau :* See Review Vol. III, N° 1.

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2. It is requested that the various Hydrographic Offices, which publish all such data on their charts, in their Sailing Directions and in the Light and Buoy Lists, should aid the Bureau in keeping its tabulation up-to-date, as this Bureau is not itself in touch with all the Buoyage and Lighthouse Services of the world.

3. It will be noted that on the first sheet of the tabulation there is set forth the "Desirability of International Uniformity in Buoyage and Buoy Lighting and a Brief History of the attempts which have been made to secure it".

The Bureau wishes to express its appreciation of the very substantial aid given to it by the Hydrographic Office of the Navy Department, Washington, in publishing gratuitously the original and the revised edition of the Buoyage charts and the world wide publicity given to its efforts by issuing the same as a supplement to its *pilot charts*, which reach the greatest possible number of seafaring people.

The results of the Conference held at Stockholm, on August 3rd, 1926, by the Technical Committee on Buoyage and Lighting of Coasts of the Sub-Committee on Ports and Maritime Navigation of the Advisory and Technical Committee for Communications and Transit of the League of Nations, will be submitted as a separate publication by Director NIBLACK, who attended the Conference to furnish information and data. As this Conference recommended the calling by the League of Nations of an International Maritime Conference in the Autumn of 1927, it remains for the International Hydrographic Conference to instruct the Directing Committee of the Bureau as to its further course of action in co-operating with the League of Nations on this question, and the nature of its participation in the coming International Conference.

The following articles have been published :

Summary of data on Uniformity in Buoyage and Buoy Lighting with data of existing systems by Director Niblack, Special Publication No 6,

Review Vol. III No 1, pages 101-139.

Further Summary of data on Uniformity in Buoyage and Buoy Lighting by Director Niblack, Special Publication No 6a.

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XXVI. — PORT SIGNALS.

RESOLUTION MADE UNDER "GENERAL REMARKS" I.

(See page 44 of Report of Proceedings.

(Discussion pages 114, par. 12; 134, par. 40-43; 157, par. 34-36)

The International Hydrographic Conference expressed the wish that the Governments of all countries should aim at Uniformity with respect to Buoyage and Port Signals.

(Circular Letter No 3 - H of 1924, see par. xxv.)

At the request of the Danish Hydrographer, he was informed that Port Signals are held to include:—

1. Pilot and Quarantine Signals,
2. Tidal Signals,
3. Traffic Signals,
4. Any other local signal necessary for the conduct of the port.

(Circular Letter No 34 - H of 1924, see par. xxv.)

(Circular Letter No 44 - H of 1924, see par. xxiii.)

(Circular Letter No 4 - H of 1925, sub. 5, see par. xxiii.)

(Circular Letter No 20 - H of 1925 (sub 2.) see par. xxv.)

(See Special Publication No 15 by Director Niblack).

Since then the compilation and tabulation of "*Visual Day and Night Port Signals of the Maritime Countries of the World*", in both English and French, has been completed by Director NIBLACK and published for the benefit of the States Members. There has further been issued Special Publication No 16 "*Summary of Data on Port Signals*". The above book and tabulations, together with those for Coastal Signals, were considered at the Special Meeting on Coastal and Port Signals of the Technical Committee for Buoyage and Lighting of Coasts of the Sub-Committee for Ports and Maritime Navigation of the Advisory and Technical Committee for Communi-

[page 135] cations and Transit of the League of Nations at Paris, on May 3rd, 1926, with which Director NIBLACK co-operated. Many of the proposals of the Bureau were incorporated in the report of the Sub-Committee and adopted by the Technical Committee when it met at Stockholm, on August 3rd, 1926. The full report of the Technical Committee will be submitted to the States Members when received from the League of Nations.

The Tabulation shows Port Signals to comprise :

- I. APPROACH :
 - 1. Cautionary, such as "Port closed" or "Entrance obstructed", "Anchor" or "Do not approach", etc.; 2. Bar and entrance; 3. Local ice; 4. Local tide or depth with plane of reference; 5. Local current; 6. Local pilot; 7. Harbour entrance lights;
 - II. ENTERING AND LEAVING :
 - 8. Right-of-way; 9. Dredger and Fairway obstruction; 10. Quarantine examination; 11. Customs and Immigration examination;
 - III. TRAFFIC :
 - 12. Traffic interrupted; 13. Explosives; 14. Anchorage area distinguishing marks; 15. Prohibited anchorage area distinguishing marks; 6. Lock; 17. Dock; 18. Berthing; 19. Bridge;
 - IV. SERVICE :
 - 20. Public holidays; 21. Time; 22. Weather; 23. Mail; 24. Medical Officer; 25. Customs Officer; 26. Death on board; 27. Water boat; 28. Ash lighter; 29. Fuel wanted; 30. Tugs and Lighterage; 31. Fire on board; 32. Harbour police; 33. Mutiny; 34. Warning signals; 35. Adjustment of compasses; 36. Vessel clearing or sailing.
- The question of uniformity in Port Signals will be considered at the International Maritime Conference which it is probable the League of Nations will call in the latter part of 1927.

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XXVII. — COASTAL SIGNALS.

The Report of Proceedings of the Conference on Buoyage and Port Signals, gives the following information about the subject :

" (6) With regard to Port Signals of the World, the work of compilation in this Bureau is laborious and "Coastal Signals for European and Mediterranean countries" is, however, being sent to Washington for publication by the U.S. Hydrographic Office and gratuitous issue with their Pilot Charts. When received from the Hydrographic Office, special proposals for uniformity in coastal signals will be issued by this Bureau, as it is considered that certain signals should be reserved for international storm warnings and for international coastal signals before allotting special signals for the purposes of ports. This is especially important in the case of night signals which use red, white and green lights and of which the combinations are limited. It is, moreover considered that uniformity in coastal signals should precede the consideration of port signals, on which subject the Technical Committee seems desirous of co-operating in making proposals. This Bureau intends to make its own proposals on signals before being willing to commit itself on the question of proposals for uniformity in port signals".

COASTAL SIGNALS, as being tabulated by this Bureau, comprise : —

Pilot; Lifesaving; Danger; Warning; Distress and Assistance; Searchlight interference; Storm Warning; Entrance Obstructed or Prohibited; Sub-marines or Divers Operating; Gun, Mine or Torpedo Practice or Experiment; Mine Sweeping or Hydrographic Sweeping for Obstructions; Non-Local Ice, Tidal, Current and Weather; Coast Semaphore; Fish nets; Distinguishing marks required by the "Regulations for Preventing Collision at Sea", and the "Convention for Safety of Life at Sea"; "Urgent and Important" Signals of the International Code; and Steering Commands.

(See Special Publication No 15, "Summary of Data on Coastal Signals", by Admiral NIBLACK, Director).

The tabulation of Coastal Signals for European and Mediterranean countries made by Director NIBLACK, and published gratuitously by the United States Hydrographic Office with their Pilot Charts, has been received and issued to the States Members, and the tabulation of Coastal Signals for "Other than European Countries" will follow shortly. These, together with Special Publication No 15, entitled "Summary of Data on Coastal Signals", by Director NIBLACK, have formed the basis of the study made by the Sub-Committee on Coastal and Port Signals referred to under "port Signals", and the proposals adopted by the Technical Committee at its Meeting in Stockholm, on August 3rd, 1926.

The question of Uniformity in Coastal Signals should be considered at the International Maritime Conference which it is probable the League of Nations will call in the latter part of 1927.

XXVIII. — A. — WIND FORCE AND THE BEAUFORT SCALE.
B. — STORM WARNING SIGNALS.

A. — WIND FORCE AND BEAUFORT SCALE.

The question of Storm Warning Signals having been pending since the meeting of the International Meteorological Committee held in Rome in 1923, the Bureau applied to a Member of this Committee in London for particulars and received the information mentioned in par. 8 of

CIRCULAR-LETTER No 15 - H. 1925.

The Directing Committee, in the course of its studies on the question of Storm Warning Signals, finds that there are considerable diversities in the various Sailing Directions in the designation of storms by the Beaufort Scale. This Scale was originally put forward in 1805, by Admiral Sir Francis Beaufort, Hydrographer of the British Navy, and is, in effect, a description of the winds of 12 different degrees of intensity above *Calm* (which is designated as zero). This classification is known as the *Beaufort Notation* and is as follows : —

BEAUFORT NOTATION.

1. — Light air.
2. — Light breeze.
3. — Gentle breeze.
4. — Moderate breeze.
5. — Fresh breeze.
6. — Strong breeze.
7. — Moderate gale.
8. — Fresh gale.
9. — Strong gale.
10. — Whole gale.
11. — Storm.
12. — Hurricane.

These different wind forces originally corresponded to various speeds of a well-conditioned man-of-war of the period; under all sails in smooth water with force of wind up to 4 inclusive; of the same ship close-hauled on a wind of a force 5-9, both inclusive; and from 10 to 12 inclusive the same ship would carry such sail as she could under the conditions of wind and sea.

2. — In the change from sail to steam the Beaufort Notation was modified, as shown in the Table I below which first appeared in 1874 and is taken from Bedford's "Sailor's Pocket

TABLE I.

RATE.		PRESSURE.	DESCRIPTION OF WIND.
Miles per hour.	Feet per minute.	Force in lbs. per square foot.	
1	88	0.005	Hardly perceptible.
2	176	0.020	Light air.
3	264	0.044	" "
4	352	0.079	Gentle breeze.
5	440	0.123	" "
10	880	0.492	Fresh breeze to strong breeze.
15	1,320	1.107	" " " "
20	1,760	1.970	Moderate gale.
25	2,200	3.067	" "
30	2,640	4.429	Strong gale.
35	3,080	6.027	" "
40	3,520	7.870	Whole gale.
45	3,960	9.900	" "
50	4,400	12.304	Storm.
60	5,280	17.733	Great storm.
70	6,160	24.153	" "
80	7,040	31.490	Hurricane.
100	8,800	49.200	" "

[page 140] Book", 9th. Edition, page 113. This Table produced considerable confusion because it was not based on the numerals of the Beaufort Notation, but on the descriptive terms used in conjunction with the numerals. It marked a step forward, however, in that it attempted to give equivalents of force and velocity of the wind, between certain limits, for each term used.

3. — It will be noted in the column *Description of Wind* that the terms *Light breeze*, *Moderate breeze* and *Fresh gale* of the Beaufort Notation, are omitted and that *Great storm* is introduced between *II. Storm*, and *12. Hurricane*. These, and later changes, introduced an element of uncertainty in the designatory terms of the Beaufort Scale. Meanwhile the Meteorological Offices of the various countries in issuing meteorological notices in the daily press and by radio, use various terms to designate the predicted forces of the wind.

For instance, Shaw, in his book on "Forecasting Weather", 1913, substituted *High wind* for 7. *Moderate gale* of the Beaufort Notation, and *Gale* for 8. *Fresh Gale*. The changes in 7 and 8 were made because, for statistical purposes, no wind of force less than 8 is accounted a gale. The "Seaman's Handbook of Meteorology", issued by the British Meteorological Office, (M. O. 215, 1917) the "Observer's Handbook", (M. O. 191, 1921) and the (British) "Admiralty List of Wireless Signals", (1924) have adopted the same designations as above, viz. 7. *High wind* and 8. *Gale*, but the "Marine Observer's Handbook" of the Meteorological Office, (M. M. 218, 1922), reverts to the former Beaufort Notation, but changes No 7 *Moderate gale* to *Half a Gale*, and No 10 *Whole Gale* to *Heavy Gale*. The Directing Committee notes that, in the Sailing Directions, Sweden characterises 6-7 Beaufort as *Moderate gale*; 7-9 as a *Gale* and 10-12 as a *Storm*. In Great Britain a *Gale* is 9-8 Beaufort, while in Canada and Russia the term *Heavy gale* is used to designate the force 8-9 Beaufort. In other countries, the terms *Violent storm*, *Severe storm* and *Dangerous storm*, are used to designate what Beaufort classes as a *Great storm* of force 11-12. In the U.S. of America, the corresponding designations are *Storm of hurricane force* or *Storm of marked violence*. The Beaufort Hurricane is designated *Cyclone*, *Cyclonic storm*; *Revolving storm* or *Tropical hurricane*, in various parts of the world. The International Meteorological Committee uses the same designation as the Beaufort Scale for wind of force 12. viz. *Hurricane*. The Directing Committee regards it as important that, at least for Storm Warnings issued for the benefit of mariners, there should be greater uniformity and accuracy in the designation of the predicted forces of wind and standard terms to correspond therewith.

4. — It is important to note that there are accurate tables for denoting the velocities of the wind corresponding to the numbers of the Beaufort Rotation. The following Table II, which taken from Shaw's "Forecasting Weather", is given also in the British "Meteorological Glossary", (M. O. 225ii, 1918), page 45 :

TABLE II.

Beaufort Numbers.	LIMITS OF VELOCITIES.			
	Statute Miles per hour.	Nautical Miles per hour.	Metres per second.	Feet per second.
0	Less than 1	Less than 1	Less than 0.3	Less than 2
1	1-3	1-3	0.3-1.5	2-5
2	4-7	4-6	1.6-3.3	6-11
3	8-12	7-10	3.4-5.4	12-18
4	13-18	11-16	5.5-8.0	19-27
5	19-24	17-21	8.1-10.7	28-36
6	25-31	22-27	10.8-13.8	37-46
7	32-38	28-33	13.9-17.1	47-56
8	39-46	34-40	17.2-20.7	57-68
9	47-54	41-47	20.8-24.4	69-80
10	55-63	48-55	24.5-28.3	81-93
11	64-75	56-65	28.4-33.5	94-110
12	above 75	above 65	33.6 or above	above 110

5. — The following Table (III) is taken from the "Meteorological Glossary", (M. O. 225 ii), but a fourth column, i.e. "Equivalent velocity in Kilometres" has been added to it and the arrangement has been changed :

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TABLE III.
Wind Pressure on a Plate and Equivalent Velocities.

Pressure in lbs. per sq. foot.	Equivalent velocity in stat. miles per hour.	Pressure in millibars* (10 ⁸ dynes per m ²).	Equivalent velocity in kilometres per hour.
0	0	0	0
0.01	2	0.01	3
0.08	5	0.04	8
0.28	10	0.13	16
0.67	15	0.32	24
1.31	21	0.62	34
2.3	27	1.1	44
3.6	35	1.7	56
5.4	42	2.6	68
7.7	50	3.7	81
10.5	59	5.0	96
14.0	68	6.7	110
above 17.0	above 75	above 8.1	above 120

* One millibar equals approximately 10 kilogrammes per square metre.

6. — The following Table IV connects Tables II and III with each other and is taken from the "Seaman's Handbook of Meteorology" (M. O. 215, 1917) 3rd edition, 1918, page xxx of the Preface.

TABLE IV.

Beaufort Notation.	Average of Velocity.	Limits of Velocity.	Equivalent pressure in lbs. upon a circular disc 1 sq. ft. in area.	DESCRIPTION OF WIND.
	in statute miles per hour.			
0	0	Less than 1	Less than 0.01	Calm.
1	2	1 to 3	0.01 to 0.04	Light breeze.
2	5	4 — 7	0.05 — 0.16	" "
3	10	8 — 12	0.17 — 0.44	" "
4	15	13 — 18	0.45 — 0.96	Moderate breeze.
5	21	19 — 24	0.97 — 1.75	" "
6	27	25 — 31	1.76 — 2.88	Strong wind.
7	35	32 — 38	2.89 — 4.43	" "
8	42	39 — 46	4.44 — 6.45	Gale force.
9	50	47 — 54	6.46 — 9.00	" "
10	59	55 — 63	9.01 — 12.16	Storm force.
11	68	64 — 75	12.17 — 15.97	" "
12	above 75	.....	15.98 and above.	Hurricane.

7. — It will be recalled that, at the International Marine Conference in Washington, 1889, the question of *Warnings of Approaching Storms* was considered and the Conference decided :—

"To invite the maritime countries interested to take into consideration the establishment of a uniform system of indicating Storm Warnings by day and by night, and that such a system should, as far as possible, include signals indicating whether the storm is approaching or has passed the station".

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8. — A letter was sent by this Bureau to a Member of the International Meteorological Committee asking for information as to the status of the question of uniformity in Storm Warning Signals so far reached by that body; he kindly replied thereto in a letter dated 12th January 1926 of which the following is an extract :

The "subject has received a very great deal of consideration from meteorologists. Everyone is agreed that an international system of Storm Warning Signals would be of great practical use,

[page 143] but I think it is equally well recognised that it is an object which cannot possibly be attained... Further, the organisation does not exist at present by means of which a decision on such a question can be made compulsory throughout the world. It was for these reasons that the International Meteorological Committee decided that all they could do was to recommend a minimum number of international signals leaving to the several countries to add their own signals to meet special local needs..... If I may express my own personal opinion, I do not think that any international organisation is so well fitted to deal with this question as the International Meteorological Committee, and the present state of affairs is not a result of want of study or discussion on their part. At the same time I am quite certain that the International Meteorological Committee would welcome any remarks from your Bureau. The date of the next meeting of the Committee has not yet been settled, but according to its constitution it should meet during the next two years".

9. With a view to formulating a proposal so the International Meteorological Committee on this important subject, the Directing Committee suggests a standardisation based on the metric system as shown in Table V : —

TABLE V.

Admiral Beaufort's Notation.	Average of Velocity.	Limits of Velocity.	Equivalent pressure in millibars* (10 ⁸ dynes per $\frac{1}{2}$ " ²)	DESCRIPTION OF WIND.
	in meters per second.			
0	.....	0 to 0.5	Less than 0.005	Calm.
1	1	0.5 — 1.5	0.005 to 0.03	Light breeze.
2	2.5	1.5 — 3.5	0.03 — 0.1	
3	4.5	3.5 — 5.5	0.1 — 0.2	
4	6.8	5.5 — 8	0.2 — 0.5	Moderate breeze.
5	9.5	8 — 11	0.5 — 1	
6	12.5	11 — 14	1 — 1.5	
7	15.5	14 — 17	1.5 — 2	Strong Wind.
8	19	17 — 21	2 — 3	Gale.
9	23	21 — 25	3 — 4.5	
10	27	25 — 29	4.5 — 6	Storm.
11	31.5	29 — 34	6 — 8	Hurricane.
12	.....	above 34	above 8	

* 1 Millibar equals approximately 10 kilogrammes per square metre and 2 lbs. per square foot.

10. — You are requested therefore :

- (a) to state your opinion as to the adoption of this table in connection with Sailing Directions and Storm Warning signals, and
- (b) to communicate with the Meteorological Office of your State with the object of obtaining its opinion as to the adoption of Table V as the standard and as to what terms should be used for the *Description of wind* in your language (other than English).

Replies.

The replies of the States Members are given in special publication N° 11 "Summary of data on wind force and the Beaufort scale", by Director NIBLACK, together with correspondence with the Meteorological authorities.

B. — STORM WARNING SIGNALS.

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CIRCULAR-LETTER No 28 - H. of 1925.

I have the honour to forward herewith, by registered post, copies of Special Publication No 8, entitled "*Summary of Data on Uniformity in Storm Warning Signals*", in which are set forth the discussions, conclusions and proposals of the several International Conferences which have dealt with the question of uniformity. Included also are sets (of three charts each) of the tabulation of "Storm Warning Signals of the Maritime Countries of the World", giving the various systems of thirty-nine of the different political subdivision of these countries which, so far, have established their own methods of signalling. These charts were prepared by Director NIBLACK and printed and issued by the U.S. Hydrographic Office as supplements to a monthly and a quarterly issue of its "*Pilot Charts*". It is for this reason that they are issued in the English language only, and the Bureau deeply appreciates the courtesy and assistance of the U.S. Hydrographic Office, particularly as this method ensures that the charts will reach the maximum number of seafaring people, in whose interests the Bureau is making its proposals.

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2. — The Directing Committee regards it as nothing short of appalling that such diversity exists in the world where the remedy is so simple, practical and ample, and, moreover, of such importance to mariners. The difficulties of keeping such charts up-to-date may be illustrated as follows : — In Canada, as given by the publications of the International Meteorological Committee, 1910-13, under "*Night Signals*" (c) (see chart), the night signal No 1 or 3 was a red light, and No 2 or 4 was a white light over a red light. The "*Marine Observer*", for June, 1924, gives the signals as now shown on the charts. The "*Marine Observer*" for October, 1925, published after the charts had gone to press, now gives the signal for No 1 or 3 as a red light and for No 2 or 4 as a red light over a white light. The Australian Commonwealth has recently announced its intention of establishing a uniform system of storm warning signals throughout its States. Manifestly these changes are confusing and undesirable internationally, and the adoption of a uniform international system is the only remedy.

3. — It is believed that the adoption of a single uniform code for local storm warning signals should in no way hamper the sending of non-local storm warning signals (which are so important to mariners) by visual display or by radio, nor should it interfere with the additional particular signals to fit special local conditions. Nor does it seem necessary to call a conference on the question, unless it is found that agreement cannot be reached by the method here adopted, of requesting the votes of States by mail. Often at international conferences on different subject the delegates of various countries have not the authority to cast the vote of their Governments for the definite adoption of proposals. The delegates, therefore, frequently bring back to their countries the proposals of the conference without all the data necessary to enable the Governments to act as intelligently as the delegates could, after having listened to all the discussions.

It is therefore requested that the Hydrographic Offices of the various countries to which this Circular-Letter and enclosures are addressed, after distributing the same to the Meteorological and Departmental Authorities concerned, obtain and forward to this Bureau the vote of the said Authorities on the definite adoption of the proposal shown in Plates I and II of "*Special Publication No 8*".

5. — Attention is invited to the fact that are two alternative systems of proposed Night Signals, one of two lamps and one of three lamps. This Bureau is in favour of the two-lamp system for the following reasons : —

i. Three countries, Germany, Netherlands, and Spain, have adopted the two-lamp system and none have, as yet, adopted the three-lamp system.

ii. The urgency of greater uniformity in coastal and port signals demands utilisation of as many one, two and three-lamp night signals as possible, and the less the number set apart for international storm warning signals the better. As a number of three-lamp signals have already been set apart for international purpose by international agreement, it is urged that two-lamp system be voted for in preference to the three.

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6. — The Directing Committee considers that the adoption of these proposals, which the International Meteorological Committee has worked out after long experience and study, will do much to facilitate the work of the League of Nations and of all International Organisations under it, in bringing about international agreements without the great expense and formality of an international gathering. With the data as here fully set forth, it should not require many arguments to convince anyone that such diversity as now exists is cumbersome, expensive, out-of-date and avoidable, and should therefore be remedied as here proposed.

7. — Votes should be forwarded as soon as possible by registered post, with any remarks, objections, modifications or reservations which it is desired to make, but definitely stating which night systems of signalling is favoured, the two lamp or the three-lamp.

[page 146] See Special Publication No 8, "Summary of data on Uniformity in Storm Warning Signals" by Admiral NIBLACK, Director.

Special Publication No 11 (Summary of Data on Wind Force and the Beaufort Scale), by Admiral NIBLACK, Director.

In Special Publication No 8a, entitled "*Further Summary of Data on Uniformity in Storm Warning Signals*" by Director NIBLACK, are given some of the answers of the various Governments with the proposals on Uniformity in Storm Warning Signals, as given in Special Publication No 8.

"*Summary of Data on Uniformity in Storm Warning Signals*", by Director NIBLACK.

Special Publications Nos 8, 8a and 11 were referred to the Commission for Maritime Meteorology of the International Meteorological Committee at Zurich, on September 14th 1926, and the result will be reported separately to the Conference by Director NIBLACK, who was invited to attend the Meeting of the Commission and to submit all data he had at that time.

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XXIX. — LIFE SAVING STATIONS.

CIRCULAR-LETTER No 8 - H. of 1925.

I have the honour to inform you that the Directing Committee, being unaware in many cases to which particular Department of the Government to apply for information which it desires to collect in the preparation of a List of Life Saving Stations of the maritime countries of the world, would esteem it a favour if you will request the proper Authorities in your State to forward to this Bureau a List of all Life Saving Stations on the coasts thereof.

SUMMARY OF REPLIES.

AUSTRALIA, BELGIUM, CHILE, DENMARK, FRANCE, GREAT BRITAIN, JAPAN, THE NETHERLANDS, NORWAY, PORTUGAL, SWEDEN and the U. S. of AMERICA, Treasury Department, gave the information requested, BRAZIL, CHINA, EGYPT, GREECE and SIAM have no official Life Saving Stations.

The Bureau is compiling a List of Storm Warning Signal Stations of the World, with their positions by latitude and longitude, as given in the various Sailing Directions, for comparison with Lists submitted officially by various Governments.

The Bureau has tried to get in touch with the Sub-Committee of Communications and Transit on the subject of Safety of Life at Sea, but as yet without success.

See Special Publication No 15, "Summary of Data on Coastal Signals", sections II, III & XVI, by Admiral Niblack, Director.

There is in course of preparation by Director NIBLACK, a Special Publication entitled "*Summary of Data on Safety of Life at Sea and Lifesaving, together with List of Lifesaving Stations of the World*", which will be issued to the States Members in due course.

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XXX. — INTERNATIONAL CODE OF SIGNALS.

Special Publication No 15, entitled "*Summary of Data on Coastal Signals*", gives the following as "*Guiding Principles*" in proposing the unification of Coastal Signals.

"5. It must be clearly recognised that the so-called International Code Book of Signals, as gotten up by the British Board of Trade, as translated into many languages and as issued by many countries, is, nevertheless, not really official since it has never been formally adopted by any international conference or body, and, moreover, the various national editions are not uniform and their provisions conflict in several important particulars with international agreements which have been officially adopted and have the force of law. While it is recognised that this Code Book is an invaluable one and should eventually be adopted internationally, this should not be done until it has been thoroughly brought up-to-date and standardised, and all conflicting provisions eliminated.

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"6. The original International Code of Signals, first published by the British Board of Trade in April, 1857, employed 18 flags, representing 18 consonants of the alphabet. In 1889 the Code was revised and the vowels were added, together with the letters X and Z, thereby completing the alphabet and giving 26 letters in all. With the adoption of the International Morse Code, the Two-arm Semaphore and the Code of Distant Signals with cones, balls and drums (or balls, square flags, pennants and whistles, or by the Three-arm Coast Semaphore), certain complications have arisen which still further demand readjustment of the International Code of Signals to clarify their meaning and avoid greater confusion".

Attention is also invited to the fact that certain signals of the International Code do not conform in all respects to those agreed upon by the International Maritime Conference held at Washington, in 1889, and the International Conference on Safety of Life at Sea, held in London, in 1914, the agreements of which Conference must be regarded internationally as having somewhat the force of law, so that where usages grow which conflict with these agreements, or where the International Code of Signals is itself in conflict, they must be made to conform. The details of these conflicting provisions are set forth in section XVII, of Publication No 8, which further says:—

"It is the opinion of the Directing Committee that the International Signal Code Book, together with its vocabularies and component Signal Codes, needs systematic modernisation and the unification of all its codes, for which purpose an international conference should ultimately be called, but, in anticipation and justification of this, that agreements between Governments should be initiated to pave the way for revising such Coastal Signals as pilot, life-saving, danger, warning and distress, which are no longer up-to-date, and that this be done according to the proposals here made".

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"Proposal No 5. That all International Conferences be convened to adopt a revised and modernised International Code of Signals", and

"Proposal No 17. The International Hydrographic Bureau recommends the publication, at some future date, of a compilation of information to mariners to serve as Volume II of a revised edition of the "International Code of Signals", and to contain a list for all coasts and ports of the world of the following data, now usually found scattered through light lists, buoy lists, sailing directions and on charts:— Tabulations of time-signal stations; time-zones; storm warning signal stations; tide signals; port and coastal signals; lifesaving stations; submarine bells; radio sound signals, direction-finding (compass) and sound-ranging signals and stations; coastal semaphore and international signal stations; Lloyds' and Semaphore telegram signal stations. Tabulations of buoyage and buoy lighting, with the addresses of the buoyage authorities; tabulation of local and non-local storm-warning signal systems and stations; urgent and important international signals; conventional signs and abbreviations of charts, and all information to mariners, aids to navigation and regulations for safety of life at sea, now scattered through other publications, some of them requiring a standardisation through international agreement. (The exact position of all stations will be indicated, giving, where necessary, their exact latitude and longitude)".

The International Code of Signals is published in :

U. S. OF AMERICA, by the Hydrographic Office,
BRAZIL, ITALY (*), SPAIN and SWEDEN, by the Navy Departments,
DENMARK, by the Department of Commerce,
NETHERLANDS, by the Departments of Commerce and of the Navy,
GERMANY, by the Home Office,
JAPAN, by the Department of Communications,
NORWAY, by the Defence Department.

See Special Publication No 15, "Summary of Data on Coastal Signals", by Admiral NIBLACK, Director.

The Bureau now has copies of the International Code of Signals of the following countries BRAZIL, DENMARK, GERMANY, GREAT BRITAIN, ITALY, JAPAN, NETHERLANDS, NORWAY, SPAIN, SWEDEN, and U. S. of AMERICA.

At the meeting in Stockholm, on August 3rd 1926, of the Technical Committee on Buoyage, Port and Coastal Signals of the Sub-Committee of Ports and Maritime Navigation of the Advisory and Technical Committee for Communications and Transit of the League of Nations, a resolution was passed to the effect that the International Code of Signals should be revised and completed so as to facilitate the sending of certain coastal and port signals.

(*) Part III is given in Italian and in English.

XXXI. — STATUTES.

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1. — (a) *Revision*, (b) *Use of Spanish Language*, (c) *Entry in to force*.
2. — *Legal status of Bureau*.
3. — *Contribution of Belgium*.

I. — (a) Draft Statutes were drawn up in London, in July 1920 by Admiral PEABRY and M. RENAUD, with the assistance of Admiral PHAFF (Admiral SIMPSON being absent from the Committee) and they were sent to the Delegates of the London Conference of 1919.

These delegates made various proposals and amendments which were carefully considered when, after the establishment of the Bureau, these draft Statutes were for the first time revised. These revised Statutes were sent to the States Members by circular-letter n° 1 of 1922 (not reproduced.)

[Page 171] Summary of replies.

Answers were received from: AUSTRALIA, CHILE, DENMARK, ITALY, JAPAN, MONACO, NORWAY, SIAM, and SWEDEN, which accepted the Statutes as proposed; ARGENTINE, BELGIUM, FRANCE, GREAT BRITAIN, GREECE, The NETHERLANDS, PERU, SPAIN and the U. S. OF AMERICA made observations, reservations and comments; BRAZIL, CHINA, EGYPT and PORTUGAL did not reply. Correspondence on the subject was also carried on with the section of International Bureaux and with the Secretary General of the League of Nations.

(b) Amongst the questions raised by some States Members was that of the use of Spanish as the third official language of the Bureau, and this question was submitted to the States Members by

CIRCULAR-LETTER N° 48 - R. of 1922.

I have the honour to inform you that the Spanish Government and the Representatives of some of the Governments of the South American associated States have proposed that the Castilian Language shall be adopted, in addition to English and French, for use by this Bureau.

2. The Directing Committee is of opinion that Castilian has great claims to such use both on account of the number of Associated and Non-Associated States in which it is officially used and of the amount of tonnage which flies the flag of these States, but against this must be set the objection that the adoption of a third language would enormously increase the work and cost of the Bureau.

3. It is found, in practice, that the subordinate personnel, at least, must understand the languages which are laid down in the Statutes as being of compulsory use by the Bureau.

4. It is not so difficult to obtain locally the services of clerks who understand the two compulsory languages, for these are much spoken in the vicinity of Monaco, but enquiry has shown that clerks who can speak Castilian would have to be brought from elsewhere.

5. The Bureau has been able to keep the expense of the personnel from becoming high by engaging clerks who are local residents. Any person imported would have to be given higher wages and, if he spoke the three languages in question, might ask still higher wages.

6. The adoption of a third language would greatly increase the work of the staff as all Circular-Letters and publications of the Bureau would have to be translated and printed in three languages and this would augment the cost of printing and of postage.

7. The Board has decided to request the Governments of the Associated States to make their wishes known in this connection and, for this purpose, I am instructed to request you to cause the accompanying sheet to be filled up and returned to me not later than 1st June 1923.

[Page 172] Summary of replies.

Answers were received from ARGENTINE, SIAM, SPAIN and the U. S. OF AMERICA, favouring the inclusion of Spanish; BELGIUM, CHINA, DENMARK, EGYPT, FRANCE, GREAT BRITAIN, GREECE, JAPAN, MONACO, the NETHERLANDS, NORWAY, PORTUGAL and SWEDEN rejected the proposal. ITALY referred the question to the League of Nations. BRAZIL and CHILE have not answered.

On account of these votes, Spanish was not entered in the Statutes as the third official language.

(c) Taking into account the observations and remarks received by the Bureau, a second revision of the Statutes was undertaken and sent to the States Members dry

[page 172] **CIRCULAR-LETTER N° 16 - R. of 1923.**

On 1st January 1922 (Circular-Letter N°1 of 1922) the Directing Committee submitted to the Representatives of the Members a draft revision of the Statutes of the Bureau inviting them to inform it whether this draft was acceptable.

2. Replies to this Circular-Letter have been received from the Representatives of the following Members:

ARGENTINE.
BELGIUM.
BRITISH EMPIRE.
UNITED KINGDOM.
AUSTRALIA.
CHILE.
DENMARK.
FRANCE.
GREECE.
ITALY.

JAPAN.
MONACO.
NETHERLANDS.
NORWAY.
PERU.
SIAM.
SPAIN.
SWEDEN.
U. S. OF AMERICA.

and the following have not answered:

BRAZIL.
CHINA.

EGYPT.
PORTUGAL.

3. After careful and detailed examination of the replies, involving in some cases lengthy correspondence, the Committee has drawn up the enclosed proposed definite Statutes.

[page 184] and their entry into force was announced by:

CIRCULAR-LETTER N° 11 - R. of 1924.

With reference to Circular-Letter N° 16-R of 1st December 1923 with which was forwarded the texts (French and English) of the proposed definite Statutes, the Directing Committee instructs me to inform you that these Statutes will enter into force on 1st January 1925.

2. The legal status of the Bureau was a subject of long correspondence with the Government of Monaco and the Section of International Bureaux of the League of Nations.

CIRCULAR-LETTER N° 4 - R. of 1925.

[page 185] 7. The Statutes (1923) were invested with the force of law in the Principality of Monaco by an Ordonnance Souveraine, dated 2nd April 1925.

[page 186] **CIRCULAR-LETTER N° 6 - R. of 1925.**

3. The question of the Contribution of BELGIUM, which led to the withdrawal of this State from the Bureau, is explained in:

CIRCULAR-LETTER N° 12 - R. of 1923.

I have the honour to inform you that the Representative of Belgium, in making final observations on the draft revised Statutes, stated with reference to the contribution of his Government that:

(Translation from the French text).

"Belgium adhered to the constitution of the International Hydrographic Bureau with the reservation that its Contribution should not exceed 6,000 Belgian paper francs.

However, being desirous of respecting the rules laid down by the Bureau for the Contributions of the States Members, except with regard to the unit of currency, I am willing to augment the Belgian Contribution to 8,000 Belgian paper francs".

[page 187] (a) The Directing Committee replied to this letter to the effect that it had never understood that the adhesion of Belgium was contingent on the annual contribution of that State being reduced to 6,000 Belgian paper francs (I. H. B. 972/7-23).

(b) It is true that the Chairman of the International Hydrographic Conference Committee was informed by Monsieur F. Urbain (Letter N° 449 of 21.11.19) that he had been "autorisé à marquer l'accord de principe du Gouvernement belge quant à la création d'un Bureau hydrographique international pour autant que l'intervention annuelle du Gouvernement belge soit réduite à 6.000 frs", and that this was confirmed by the Belgian Chargé d'Affaires in London by a letter to the British Foreign Office dated 6th December 1919. Monsieur Urbain, by letter N° 475 of 9th December 1919 repeated this but added "Si, bien entendu, la quote-part ainsi précisée ne paraissait pas suffisante, je transmettrais à mon département toute proposition que vous jugeriez utile de faire à ce sujet".

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(c) Again by letter N° 606 of 18th March 1920, Monsieur Urbain stated that "Le système de contribution proposé par les délégués de Monaco et de l'Argentine et mentionné dans votre lettre du 1^{er} Janvier dernier est celui qui semble le mieux répondre aux nécessités. Il ne reste qu'à préciser quel est le montant de la contribution fixe et sur quelles bases doit être établie la contribution complémentaire.

"C'est le montant des dépenses prévues, ainsi que le nombre et l'importance des Etats adhérents, qui constitueront les meilleurs guides à cette fin.

"En émettant cet avis, je crois devoir vous rappeler qu'il est entendu, *pour l'instant*, que la participation financière de la Belgique ne dépassera pas 6.000 francs".

(d) It is precisely the system mentioned in this last letter which was adopted by the International Hydrographic Conference Committee and which was proposed in the original draft Statutes dated 17th July 1920 for adoption by the States represented at the International Hydrographic Conference, copies of which were sent to Monsieur Urbain as the official Representative of the Belgian Government.

(e) Presumably Monsieur Urbain submitted these draft Statutes to the Government and particularly (in accordance with the terms of his letter N° 475 of 9.12.19., see paragraph (b) above) Article 35 thereof which deals with the amounts of the annual contributions.

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(f) By this letter N° 841 of 7th October 1920, Monsieur Urbain, in his character of Representative of the Belgian Government, forwarded to the International Hydrographic Conference Committee certain criticisms of the draft Statutes suggesting modifications to Articles 21, 45, 47 and 49 and made observations with reference to the "Dispositions Provisoires". No remark or criticism with reference to Article 35 was included in this letter and it was assumed therefore that this Article had been accepted as proposed.

(g) Since the establishment of the Bureau in June 1921 the following correspondence between the Belgian Authorities and the Bureau has taken place:

I. H. B. 174/21	13th. October 1921.	To Ministre des Travaux Publics Bruxelles. Asking for payment of 1921 contribution.
N° 3761 A.	22nd. November 1921.	From Directeur General Ponts et Chaussées. Asking how 6,000 frs gold, representing the annual contribution, is to be paid.
I. H. B. 326/21.	30th. November 1921.	To Ministre des Travaux Publics. Giving directions as to payment of the contribution and calling attention to Article 35 of Statutes (as to amount of contribution).
I. H. B. 147/22	13th. February 1922.	To Ministre des Travaux Publics. Asking when the 1921 contribution will be paid.
I. H. B. 248/22.	9th. March 1922.	To Ministre des Travaux Publics. Referring to above correspondence and requesting payment of 1921 contribution.
N° 51808-39	20th. March 1922.	From Ministre des Travaux Publics. Stating that payment will be made when formalities are completed.
I. H. B. 356/22.	29th. March 1922.	To Ministre des Travaux Publics. Expressing surprise that more formalities are required and hope that they will soon be completed.
I. H. B. 639/22.	14th. June 1922.	To Ministre des Travaux Publics. Asking when payment may be expected and proposing a personal visit by President of the Directing Committee.
I. H. B. 695/22.	7th. July 1922.	To Ministre des Travaux Publics. Stating that President will call on Minister.
No number	11th. July 1922.	From Chef du Cabinet du Ministre des Travaux Publics. Arranging for visit of President to Director Général, Administration Centrale des Ponts et Chaussées.

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This interview took place on 22nd. July 1923.

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The Director of the Ponts et Chaussées stated that 6,000 Belgian paper frs. only, had been provided for 1921. The President of the Directing Committee informed him that this sum would be accepted as the 1921 contribution for the Bureau had been established for 6 months only in that year, but he added that in 1922 and future years the provisions of the Statutes would apply.

N° 2585.	9th. October 1922.	From Director Général des Ponts et Chaussées. Enclosing cheque for 6,000 frs Belgian (paper).
I. H. B. 1037/22.	14th. October 1922.	To Director Général des Ponts et Chaussées. Acknowledging receipt of the cheque.
I. H. B. 29/1-23.	9th. January 1923.	To Ministre des Travaux Publics. Asking for payment of 1922 contribution and pointing out that this amounts to 8,000 frs Swiss.
N° 1808/39.	29th. June 1923.	From Ministre des Travaux Publics. Letter now under consideration, quoted at the beginning of this Circular-Letter.
I. H. B. 972/7-23.	20th. July 1923.	To Ministre des Travaux Publics. Answer to letter of 29th. June 1923, of which answer this Circular-Letter is a paraphrase.

(h) The Directing Committee has no power to alter the amount of the annual Contribution of any Member of the Bureau as this would involve a change in the Statutes (vide Article 44 of the Statutes, Article 48 of the draft revised Statutes) and it has made no proposal to do so as it was understood that Belgium had accepted Article 35, as stated in paragraph (f) above.

2. The matter is therefore referred to the Members for the expression of opinion as to the reduction of the annual contribution of Belgium.

3. In doing so the Committee feels constrained to call the following facts to the attention of the Members:

(a) The case of Belgium in no way resembles that of Monaco in that:

- (i) Belgium owns more than 1/4 million tons of shipping.
- (ii) The coasts of Belgium and of the Belgian Congo are of considerable length.
- (iii) Both Belgium and the Belgian Congo have Hydrographic Services.

[page 190] (b) The Committee does not recommend that an exception to the accepted Statute be made in this case.

4. I am instructed to request you to inform the Bureau of the decision or your Government in this matter at your earliest convenience.

CIRCULAR-LETTER N° 1 - R. of 1924.

With reference to Circular-Letter N° 12-R of 1923, which was despatched to the Representatives of all the States Members on 1st October 1923, I have the honour to inform you that the Representatives of:

DENMARK,
FRANCE,
GREAT BRITAIN,
ITALY,

MONACO.
NETHERLANDS,
NORWAY,
PORTUGAL,

SPAIN,
SWEDEN.
U. S. OF AMERICA,

have announced to the Bureau the opinions of their Governments on the subject of the proposed reduction of the Belgian contribution.

2. Under date 12th December 1923 the Belgian Representative wrote to the Bureau as follows:

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(Translation from the French text).

ADMINISTRATION
DES
PONTS ET CHAUSSEES

1^{re} DIRECTION

N° 61.808-39
N° 3101 A. de S^{te}

2 Annexes

OBJET :
Bureau Hydrographique International
Cotisation de la Belgique

SIR,

You have been kind enough to forward to me a copy of Circular-Letter N° 12-R which you sent on 1st October last to the Members of the International Hydrographic Bureau, on the subject of the request of the Belgian Government to cause its contribution to be fixed at 8,000 Belgian francs (paper).

I note that, in this Circular-Letter, no mention is made either of the letter sent on 21st. February 1920 to Captain Douglas (*) of the British Admiralty, or of the reply made by him to the Department of Colonies on 25th February 1920.

I would be obliged if you will kindly forward a copy of this correspondence to the Members of the I. H. B. in order that their information may be complete.

Please accept *etc.*

On behalf of the Minister
(Signed) J. DEVAM
Engineer-in-Chief, Director.

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3. In accordance with the request contained in this letter the following correspondence is published for the information of the Members :

Letter from Ministry of Colonies.

N° F/9. (Translation from the French text).

Brussels, 21st February 1920.

TO CAPTAIN H. P. DOUGLAS, C. M. G., R. N.
Assistant-Hydrographer,
Admiralty
LONDON.

SIR,

With reference to your letter of 24th October last I have the honour to request you to note the adhesion, on principle, of my Department to the creation of an International Hydrographic Bureau provided, as you have informed me, that the colony of the Belgian Congo will not be expected to make a separate contribution and that of the Belgian Government will cover that of the colony.

I thank you for the steps kindly taken in this matter.

The Belgian Government informs me that it has communicated to you its adhesion on principle to the creation of an I. H. B. provided that its annual contribution does not exceed 6,000 francs.

Kindly inform me whether this contribution suffices for both Belgium and the colony.

For the Minister,
(Sgd.) ARNOLD
Secretary-General.

Letter from the Chairman of the International Hydrographic Conference Committee.

Admiralty,
LONDON.
25th February 1920.

SIR,

I have the honour to acknowledge the receipt of your letter N° F/9 of the 21st February 1920.

(*) Note by the I. H. B. : See page 15, Hydrographic Review, March 1923.

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I note with pleasure that the Ministry of Colonies adheres in principle to the creation of the International Hydrographic Bureau, provided that the Colony of the Belgian Congo is not expected to make a separate contribution to the expenses thereof. I would add that it appears to be accepted on principle — though of course no convention on the matter has yet been signed — that the contribution of the mother country covers all Colonies and Dependencies.

The sum which the Belgian Government proposes to pay annually towards the support of the International Hydrographic Bureau (namely 6,000 francs) appears to be amply sufficient to cover both Belgium and the Belgian Congo.

I have the honour to be, Sir,

Your obedient Servant.

(Sgd.) G. SPICER SIMSON

Captain R. N.

for Capt. H. P. DOUGLAS, R. N.

[page 192]

4. In forwarding this correspondence the Directing Committee desires to call the attention of the Members to the following.

(a) The letters were omitted from those quoted in Circular-Letter No 12-R of 1923, as the file "*Contributions Belgium*," was the only one referred to and this correspondence originated with the Belgian Ministry of Colonies.

(b) At the time when these letters were written the matter of the annual contributions to be made towards the upkeep of the Bureau was still under examination by the I. H. C. Committee and no proposal had yet been put forward.

(c) The so-called "*Organisation of the I. H. B.*" (i. e. the original Statutes) were not drawn up until five months later (July 1920).

(d) The expression of the opinion that 6,000 francs "*appears* to be amply sufficient to cover both Belgium and the Belgian Congo" cannot be taken as a definite acceptance of this sum for the Belgian annual contribution.

The Committee had no power to fix the scale of contributions which had yet to be drawn up.

(e) The first concrete proposal as to the amount of the contributions which was made to the Representatives of the States, was that put forward by the "*Organisation of the I. H. B.*" in July 1920 and this obviously cancelled all previous correspondence on the subject.

(f) The Belgian Representative, in his letter No 606 of 18th March 1920 (quoted in Circular-Letter No 12-R, par I (c), admits that nothing definite had been settled by using the expression "*pour l'instant*" (for the moment) it is understood that Belgium's contribution shall not exceed 6,000 francs.

(g) This correspondence therefore, does not seem to affect the matter in any way, though the Directing Committee feels constrained to publish it as requested by the Belgian Representative.

(h) The Committee considers that this request might have been made earlier and that the Representative of the Belgian Government should not have allowed sufficient time to elapse to permit the majority of the Members to reply to the Circular-Letter under consideration before making the request.

5. The Directing Committee would be obliged if all those States Members which have already expressed their opinions on the subject of the proposed reduction of the Belgian Contribution (see par. I of the present letter) will inform it whether the correspondence quoted above in any way affects the opinions communicated to the Bureau.

[page 193] CIRCULAR-LETTER No 10 - R. of 1924.

With reference to previous Circular-Letters on this subject, i. e. Nos 12-R of 1st October 1923 and 1-R of 8th January 1924, I am instructed by the Directing Committee to inform you as follows: —

1. — More than two thirds of the other States Members have replied to the effect that they are of opinion that in the case of Belgium no exception should be made to the terms of the Statutes governing the amount of contribution payable.

The following Members have not expressed an opinion: —

ARGENTINE.

BRAZIL.

CHILE.

GREECE. |

JAPAN.

& PERU.

2. — Consequently the proposal made by the Representative of Belgium (see paragraph 1 of Circular-Letter No 12-R of 1923) that the contribution should be payable in Belgian paper francs is rejected.

1,111(1921) CIRCULAR-LETTER N° 3 - R. of 1925.

I have the honour to inform you that a letter has been received from the Minister of Agriculture & Public Works of Belgium by which he informs the Bureau that this Government withdraws its Membership in consequence of the decision made by the States Members with reference to the amount of the annual contribution due from Belgium (see Circular-Letters N°s 1-R & 10- of 1924).

2. The Belgian Government is now being approached with a view to the settlement of the question of the contributions due for the years 1922 (part outstanding), 1923 and 1924, the total amount due being Swiss francs 20,611.55.

CIRCULAR-LETTER N° 5 - R. of 1925.

I am instructed by the Directing Committee to inform you of the correspondence which has passed between that Committee and the Minister of Agriculture & Public Works of the Belgian Government after the receipt of the letter quoted in the Bureau's Circular-Letter N° 3-R of 25th April 1925 by which the Belgian Government withdrew its Membership of the Bureau.

2 I have the honour therefore to enclose copies of the Bureau's letter N° 697/25-16/3 of 22nd April 1925 and of the reply received thereto dated 28th May 1925 together with translations into English thereof.

3 The Directing Committee instructs me to add that the subject of the Membership and the Contributions of Belgium will be brought before the next Hydrographic Conference in order that circumstances such as those which have arisen and which could not be foreseen, may be provided for in the Statutes.

1,111(1921)

TRANSLATION

le 22 Avril 1925.
(Registered)

22nd April 1925.

N° I H. B. 697/25-16/3.

MONSIEUR LE MINISTRE,

I have the honour to acknowledge the receipt of your letter N° 51808-39 of 8th April confirming the withdrawal of the Belgian Government from the International Hydrographic Bureau.

The Directing Committee deeply regrets this decision which is in serious contrast with the appreciation and encouragement received from the other Members of the Bureau. They are being informed of the decision by Circular-Letter.

If it be taken that this decision is effective as from 31st December 1924, i. e. neglecting the fact that the year 1925 had commenced before any notification of the decision was received, I submit to you hereunder the position of Belgium according to the Statutes with reference to the payment of contributions towards the upkeep of the Bureau: —

Due from Belgium :

Contributions for the years 1921, 1922, 1923 et 1924 i. e. four times 8,000 Swiss Francs	32,000.00 Sw. Frs.
---	--------------------

Received from Belgium :

- (1) A payment of 6,000 Belgian Frs. on 9th October 1922 as contribution for 1921. As the Bureau was not established until June 1921 the contributions paid for that year, even those which were not of the Statutory amount, were taken as sufficient; the amount paid must therefore be credited to Belgium as worth..... 8,000.00 Sw. Frs.
- (2) A payment, 14th February 1924, of 14,183.50 French Frs. which produced, when converted at the rate of exchange then prevailing..... 3,388.45 Sw. Frs.

Total received	11,388.45 Sw. Frs. —
Balance due.....	20,611.55 Sw. Frs. —

The jurisprudence of all countries lays down that the withdrawal of a Member from any Association does not absolve the Member from paying subscriptions due at the time of withdrawal and Article 4 of the Statutes is based on this principle; I have no doubt therefore but that you would wish to cause the balance to be paid and the Bureau would be obliged if this be done as soon as possible

[Page 195]

TRANSLATION

Bruxelles, le 28 Mai 1925.

MONSIEUR LE SECRÉTAIRE GÉNÉRAL,

I have the honour to acknowledge the receipt of your letter N° 697/25-16/3 of 22nd April last.

As was stated in my letter of 17th March last, N° 580 A outward, steps are being taken for the payment of the amount of the contribution for the year 1924, namely 8,000.00 Belgian Francs.

When the International Hydrographic Bureau has received this sum the Belgian Government will have met its liabilities.

Accept, Monsieur le Secrétaire Général, the assurance, etc...

Signed : RENKIN

for
the Minister.

As stated, the question of the contribution still due from Belgium will be brought before the Conference.

PART I

E

RESOLUTIONS ADOPTED BY THE CONFERENCE

A. — RESOLUTIONS CONCERNING THE STATUTES OF I. H. B.

(Reports of the Committee on Statutes Were approved by the Conference)

I. — MODIFICATIONS IN THE STATUTES

REVISION OF LISTS OF STATES MEMBERS OF THE BUREAU.

Article 2.

Article 2 is replaced by the following :

"States which were Members of the Bureau at its creation in June 1921, those which have joined the Bureau subsequent to its establishment, and those which have withdrawn their membership, are enumerated in Appendices A, B and C.

These Appendices shall be kept up to date by the Secretary-General".

CONDITIONS OF ADMISSION AS A MEMBER OF THE BUREAU.

Article 3.

Article 3 is modified as follows :

(a) "Any other State Member of the League of Nations, if it so desires, shall be admitted as a Member of the Bureau on condition that it pays its proportional part in the assets of the Bureau, as given in the Balance Sheet of the Annual Report if it is admitted before July 1st and in a balance sheet to be drawn up for July 1st, if it is admitted after that date.

(b) This proportional part will be calculated as follows :

"The total amount of the assets of the Bureau, multiplied by the number of votes allocated to the new State Member according to its tonnage, divided by the total number of votes allocated to the aggregate States Members before the admission of the new Member.

(c) "The admission of States which are not Members of the League of Nations will be decided by the vote of the Members of the Bureau, and not less than two-thirds of the number of these must give their consent to such admission, which implies the financial obligation mentioned in Article 3 (a) and (b)."

DELAY IN PAYING CONTRIBUTIONS.

Article 4 (b).

Article 4 (b) is modified as follows :

"Any State Member which does not pay the full contribution due shall be given two years in which to make good the deficit, beginning with the first notice given by the Directing Committee; at the end of this period its Membership shall be suspended until the balance due is received."

SUSPENSION OF MEMBERSHIP.

Article 5.

Replace 5 by 5 (a).

Insert 5 (b).

" If its financial obligations to the Bureau are not settled before the withdrawal is notified, that State shall be crossed off the list of Members of the Bureau and may not again become a member until the obligations have been settled in accordance with the Statutes, even though the State be a Member of the League of Nations. "

PRECEDENCE OF DIRECTORS.

Article 22.

The following sentence is added to Article 22 (i) :

" Their order of precedence and the method of their election are regulated by Articles 59 and 60. "

CONDITIONS OF ELIGIBILITY OF DIRECTORS.

The words " at least two of them " of Article 22 (ii) are deleted.

Paragraph (iii) of Article 22 is deleted. Consequently paragraph (iv) and (v) become (iii) and (iv).

SICK LEAVE OF DIRECTORS.

The following paragraphs are added to Article 22.

" (v). A Director, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be a Member of the Directing Committee.

TRIENNIAL LEAVE OF DIRECTORS.

" (vi). In every three years of service, each Director is entitled to two months leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him. "

PREPONDERANT VOTE FOR THE PRESIDENT OF THE DIRECTING COMMITTEE.

Article 26.

Add to Article 26 :

" If only two Directors attend a Committee meeting and a decision cannot be postponed to a full meeting, the vote of the President or of the acting President shall be preponderant. "

SICK LEAVE OF THE SECRETARY GENERAL.

Article 29.

Paragraph (b) is omitted. Therefore (c) and (d) become (b) and (c), and the two following paragraphs are added :

" (d). The Secretary-General, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be Secretary-General.

TRIENNIAL LEAVE OF THE SECRETARY GENERAL.

"(e) In every three years of service, the Secretary-General is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him."

REELIGIBILITY OF THE SECRETARY GENERAL.

Article 31.

Article 31 is replaced by the following :

"He may be nominated as a candidate for the post of Secretary-General at the next election."

ADOPTION OF THE GOLD FRANC AS THE MONETARY STANDARD FOR THE BUREAU.

Article 33.

Replace in Article 33 and in all the other articles in which they appear, the words : "Swiss francs gold" by "gold francs."

This modification will take effect from 1st January 1927.

REVISION OF THE TABLES OF TONNAGES.

Article 34.

Article 34 (b) is modified as follows :

"The tonnages taken for the purpose of determining the contributions of the States Members are given in Appendix D, which is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Articles 61 (b) and 64)."

REVISION OF THE TABLES SHOWING SHARES, VOTES & CONTRIBUTIONS.

Article 35.

Article 35 is replaced by the following :

"35. (a) The scale given in Article 34 (a) (iii) determines also the number of votes allocated to each member in the elections for the Directors and Secretary General (see Articles 59 and 60). The number of votes is the same as the number of shares. The table which shows the shares, votes and contributions of the States Members is contained in Appendix E and is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Article 61 (b) and 64)."

"(b) The Principality of Monaco is treated on a special basis. To it are allotted two votes and its annual contribution is fixed at 6,000 French francs paper."

REVISION OF THE TABLES (Appendices D & E) FOR ELECTIONS.

Article 37.

Article 37 is replaced by :

37. "To become effective in the election for the Directors and Secretary General, alterations which Members consider should be made in Appendices D and E must reach the Directing Committee at least ten days before the opening date of a Conference. Such alterations will be submitted to the Conference for approval at the first Plenary Session."

"In the case of a bye-election, any alterations proposed must reach the Bureau not later than the latest date fixed for the receipt of the lists of candidates."

LOWER LIMIT OF EXPENDITURE REQUIRING ONE DIRECTOR'S APPROVAL.

Article 43 (b).

The words " French francs paper " are replaced by " gold francs."

DATE OF ISSUE OF ANNUAL REPORTS.

LIST OF OFFICIAL REPRESENTATIVES.

DATE OF ISSUE OF ESTIMATES.

Article 45.

Article 45 is replaced by :

45 (a) " In the month of January of each year, or when the Auditor of the League of Nations has made his Report, the Bureau will publish an Annual Report on its work and finances."

(b) " A list of the official Representatives of the Members and their respective addresses shall be included in the Annual Report."

(c) " The Directing Committee shall draw up and publish annually, during the month of September, estimates of receipts and expenditure for the following year, with all necessary explanations."

Article 48 is suppressed.

Article 49 becomes *Article 48*.

PARTICIPATION OF LEAGUE OF NATIONS IN CONFERENCES.

Article 50 becomes *Article 49*, and is modified as follows : —

Insert between " Members " and " and the Directing Committee " the words : " Representatives of the League of Nations in a consultative capacity."

Article 51 becomes *Article 50*.

LANGUAGES USED AT CONFERENCES.

Article 51 (new).

" The languages used at the Conferences shall be English and French."

APPOINTMENT OF COMMITTEES BY CONFERENCES.

Article 55.

Article 55 (a) is modified as follows :

" Periodic Conferences will specially examine the reports of the Bureau as to its work and its finances since the last Conference. For this purpose, in their early stages, small committees will be nominated, the conclusions of which will be submitted to a Plenary Session of the Conference.

EARLY DESPATCH OF PREPARATORY REPORTS FOR CONFERENCES.

Article 56.

Article 56 (a) is modified as follows :

An addition is made in the last sentence, between the words " This " and " shall be dispatched," so that it will read :

" This, together with the report on the Work of the Bureau and its Finances since the last Conference, mentioned in Article 55 (a), shall be dispatched to the Members six months before the proposed date of Meeting."

PROCEDURE TO BE FOLLOWED FOR BRINGING SUBJECTS BEFORE CONFERENCES.

Article 56 (b) is modified as follows :

" No subject, which is not included in the final schedule, shall be discussed unless it is proposed by at least three of the Delegations of the Members ; the President of the Conference must be notified, in writing, not less than 24 hours beforehand, of the intention to introduce such subject."

POWER OF THE PRESIDENT TO MAKE A DECISION.

Article 58 (c).

The last line of *Article 58 (c)* is modified as follows ; — " the elections mentioned in *Article 59 (ix)*."

PREPARATION AND DISTRIBUTION OF LISTS OF CANDIDATES.

Article 59. (vi)

Article 59 (iv) is modified as follows :

" The Bureau will then collate the lists sent by the States Members and present them to each Delegation at the opening of the Conference with copies of the notes referred to in paragraph *(ii)* of this article."

PROCLAMATION OF DIRECTORS.

Article 59. (vii).

The last sentence is modified as follows : —

" The principles of *Article 58 (a)* and *(b)* will apply."

INTERPRETATION OF TEXTS.

Article 65.

The last sentence of *Article 65* is modified as follows :

" Should any divergence be found in the meaning of the two texts, the Directing Committee will decide on the precise interpretation."

II. — OTHER QUESTIONS SUBMITTED TO THE STATUTES COMMITTEE.

REDUCTION OF CONTRIBUTIONS.

" After careful consideration and consultation with the Finance Committee, the Conference is inclined to the view that it should be possible to effect a reduction in the scale of contributions of the States Members without impairing the efficiency of the Bureau. As, however, the existing uncertainty as to the future movements of the French franc renders it impossible to form a reliable estimate of the relation between receipts and expenditure during the next five years, the Conference does not wish to alter the Statutes at the present time. But it considers that the new Directing Committee should thoroughly explore the financial situation of the Bureau, obtaining, if necessary expert assistance from one or more of the States Members, and at the end of the next financial year should render a full report on the matter to all the States Members, indicating, in particular, what economies have been or can be effected."

REDUCTION OF SALARIES OF DIRECTORS.

The Conference rejected the reduction of salaries of Directors.

DRAWING UP OF AN INTERNAL ORGANISATION FOR THE BUREAU.

The Conference rejected the suppression of the Secretary General, and approved the following resolution :

"The Directing Committee recently elected ought to consider, as its first and principal duty to be fulfilled as soon as possible, the formation by it of an internal organisation of the Bureau and of rules which guarantee that the very considerable credits entrusted to the Bureau by the Conference shall be employed as effectively as possible in the carrying out of the work of the Bureau as ordained by the Statutes."

"These new rules should be communicated to the States Members immediately upon their adoption."

DATE OF COMING INTO FORCE OF CHANGES IN STATUTES.

"The Conference decides that all changes in the Statutes adopted by the Conference shall take effect immediately, with the exception of the introduction of the gold franc, regarding which a special decision has been taken."

B. — RESOLUTIONS CONCERNING FINANCIAL ADMINISTRATION OF THE I. H. B.

(The Report of the Committee on Finances was approved by the Conference.)

BELGIAN CONTRIBUTION IN ARREAR.

The Conference considers that the matter of the Belgian contribution should be referred to the League of Nations with a view to an attempt being made to recover the arrears. But at the same time the Conference does not consider that any expense should be incurred by the Bureau in attempting to recover the money.

SALE OF PUBLICATIONS.

The Conference is of opinion that the publications should be priced nearer to their cost price.

"The Conference is of opinion that a greater effort should be made to increase the number of sales, and suggests as a commencement that the Bureau should circularise the Hydrographic Offices and other similar institutions with a view to those Offices bringing these publications to the notice of the various organisations."

FREE DISTRIBUTION OF PUBLICATIONS.

"The Conference is of opinion that this Distribution List should be scrutinised by the various States Members, with a view to its being revised, and that in those cases where copies of the Bureau's publications are sent to the various editors of magazines and such like people, the Bureau should make it its duty to see that it obtains publications in return. The list should also be revised every year by the various States Members."

INTERESTS ON BANK DEPOSITS.

"The Conference is of opinion that the larger portion of the Bank deposits repayable at sight might with advantage be transferred to a deposit account or even invested in some Government Stock or other Trustee Security so as to increase the rate of interest payable."

TRAVELLING AND CHANGE OF RESIDENCE EXPENDITURE.

The Conference having examined the statement of payments under Sub-head "Change of Residence Allowance", is of opinion that these are in excess of those allowed to officials taking up an appointment in similar circumstances, and considers that in future the payment should be as far as possible brought into line with the system followed by the League of Nations. It is further of the opinion that visits of the Directors and Personnel to meetings and conferences should only be undertaken with a quite definite object connected with the work of the Bureau and on such occasions every effort should be made to keep expenses low.

RENT OF PREMISES.

The Directing Committee, within the next four years when the lease falls in, is to consider the future accommodation of the Bureau, with a view to the rental not being increased and the possibility of procuring other quarters more suitably placed without increase in cost, or of buying or building premises outright.

COST OF PUBLICATIONS — THANKS TO THE U. S. HYDROGRAPHIC OFFICE.

The Conference wishes to place on record its gratitude and thanks to the United States Hydrographic Office for their kindness in publishing, for the benefit of the States Members, sheets showing systems of buoyage, etc...

PURCHASES FOR I. H. B. LIBRARY.

The Conference resolves that the States Members should advise the International Hydrographic Bureau of any hydrographic publications which might be of value to the Bureau, so that the Bureau could purchase them, or possibly obtain them gratuitously.

FINANCIAL CONTROL.

The Conference resolves that the Directing Committee of the Bureau shall take advantage of the Financial and Control Sections of the League of Nations in handling the funds of the Bureau.

C. — RESOLUTIONS CONCERNING WORK OF THE BUREAU

(The Report of the Committee on the Work of the Bureau was amended and then approved by the Conference).

a) Questions referred to the Bureau by the London Conference 1919.

The Conference considers that

"Satisfactory progress had been made generally, in endeavouring to complete the work entrusted to the Bureau, but the Conference is of opinion that further investigations are necessary in the subjects detailed in the Report drawn up by the Bureau before the task can be said to be accomplished".

DISTANCE TABLES.

"On the question of drawing up "Distance Tables", the Bureau should not have waited for the decision on the Limits of Oceans and Seas, it being generally considered that the latter has no connection with the subject."

(Distance Tables are already in existence and starting points have already been adopted, therefore, in order to solve this question, the various Hydrographic Offices should be advised to publish Distance Tables at their early convenience).

b) Researches made by the Bureau.

"The Conference takes note of the various researches and publications of the Bureau and intends to discuss them in detail when the question of the work to be accomplished by the Bureau in future comes under discussion."

"The Conference approves of the efforts made by the Bureau in the past."

c) Future work of the Bureau.

SUBJECTS RELATING TO NAVIGATION ; BUOYAGE, SIGNALS, etc.

"The Conference considers that work dealing with navigational matters may be continued as future work of the Bureau."

HARMONIC ANALYSIS OF TIDES.

The Conference considers that, whilst publication of Tidal research work should be continued by the Bureau, the lines on which the work be undertaken should be in conformity with the resolutions concerning Tides adopted by this Conference.

OTHER FUTURE WORK OF THE BUREAU.

"The Conference considers that the future work of the Bureau should include investigation into Echo Sounding, evolution of new hydrographic instruments, chronometers, and all other instruments in connection with actual hydrographic surveying, and so far as was in its power, the work of Chart reproduction should be thoroughly investigated in all its branches, and information so obtained on all these promulgated forthwith for the information of the various States Members."

STUDY OF OCEANIC CURRENTS.

The Conference agrees that such study should be left to the various Hydrographic Offices which are at present actively pursuing these investigations for it is considered that such investigation by the Bureau is beyond the capacities of the Staff.

D. — RESOLUTIONS CONCERNING CHARTS AND TECHNICAL DOCUMENTS.

RESOLUTIONS CONCERNING CHARTS (*)

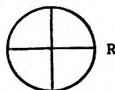
1. SYMBOLS.

(A) PUBLICATION OF LISTS OF SYMBOLS AND ABBREVIATIONS.

"The Committee considers that the Bureau should prepare an International list of symbols and abbreviations exclusively for the use of mariners, and also another list of Symbols and Abbreviations for the use of cartographers."

(B) SYMBOLS TO BE USED ON CHARTS FOR WIRELESS STATIONS.

The Committee adopted the following symbol and letter:—



Neither symbol nor letter should be coloured.

The German proposal, the text of which will be found in the Report of the Committee, might be used as a basis for classification and terminology for completing the abbreviation R, when considered necessary.

(C) SYMBOLS ADOPTED BY THE COMMITTEE FOR SUNKEN ROCKS:

The Committee decide to use the symbol for sunken rocks of small area (pinnacles), to a depth of 10 metres, the depth being indicated by a number placed at the side of the symbol, as follows:



(the numeral should be of a different printing type from that of the soundings of the chart).

(D) SYMBOLS AND CONVENTIONS FOR WRECKS ADOPTED BY THE COMMITTEE.

1. Wrecks which lie in a position where the depth of water exceeds 110 fathoms (200 metres) will not be shown on the chart.

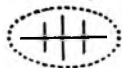
2. In positions where the depth of water does not exceed 110 fathoms (200 metres), wrecks will be classified and charted as follows:

(a) Wrecks showing a portion of the hull or superstructure above low water will be shown on all appropriate charts by the following symbol without the word Wreck or the date.

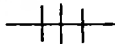


(*) N.B. — The Resolutions mentioned under the Headings I, II, III, IV and Va, referring to Charts, Sailing Directions, Light Lists, Notices to Mariners and Catalogues were not discussed by the Conference in Plenary Session. They form the final Report of the Committee on Charts and Technical Documents, which, by a decision of the Conference, should be submitted to those interested, requesting them to make their observations on the subjects. As soon as the Bureau has received these observations they will be sent to the States Members.

(b) Sunken wrecks which are dangerous to surface navigation will be shown thus :



(c) Sunken wrecks which are not dangerous to surface navigation will be shown thus :



The limiting depth being 8 fathoms or 15 metres.

(d) Remains of a wreck no longer a danger to surface navigation, but to be avoided by vessels anchoring or trawling, will be shown, on the largest scale chart only, by the symbol :—



foul. } or the translation of the word foul
in the language desired.

(This last proposal received an equal number of votes, 7 for and 7 against. It was referred to the Plenary Session).

3. On the largest scale chart, the date (year) of the wreck will be inserted when known, if the clearness of the chart is not affected thereby.

4. On smaller scale charts, wrecks will not invariably be shown in the waters covered by larger scale charts, except when they are dangerous to navigation. When necessary, a note to this effect will be inserted on the chart.

5. Doubtful wrecks will be marked on large scale charts with the notes "E. D.", "P. D.", or "P. A.", which signify : "Existence Doubtful," "Position Doubtful" or "Position Approximate" as necessary, in order to differentiate them from wrecks the particulars of which are authentically known.

6. The position of the centre of the wreck will be indicated in the case of 2 (a) by a small circle on the water-line at the base of the mast ; in the cases of 2 (b) and (c) by the intersection of the horizontal line and the middle vertical line whilst in the case of 2 (d), it is the centre of the dotted circle.

7. Dangerous wrecks should be shown on all appropriate charts taking due account of the scale. It is evident that such wrecks cannot be shown on very small scale charts.

(E) DEPTH CONTOURS.

1. "As different proposals have been made by the Bureau and by France, Portugal, and Germany, the Committee proposes that the Bureau should be requested to examine the question afresh and to submit new proposals to the States Members, and notes that no objection has been raised against the advisability of making the symbols for depth contours the same for all countries."

2. Several Delegates considered that the five-metre line should be simpler and heavier than the others, because it is the most important. This recommendation is referred to the Bureau.

Besides the Committee considers preferable to settle on a certain number of lines, but not all, so as not to make the number of symbols too great.

3. "General Danger Line." The Committee adopted this term.

There is no objection to the adoption of a "general danger line" to enclose a part of the sea which navigators should avoid altogether on account

of the great number of obstacles to navigation. Some nations have already adopted for this symbol a simple dotted line, similar to the 1 metre contour, because it is not probable that the former will be mistaken for the latter and, should this happen, it would not involve danger.

1 metre or general danger line.

4. The Committee decided that no figures should be shown against the lines of equal depth.

5. The Committee decided that it was not necessary to establish a special line to represent each metre of depth between 10 and 50 metres.

6. In view of the fact that the Committee has accepted the principle that each country will use those lines only which seem to it the most convenient, it was not necessary to discuss the advisability or the non-advisability of introducing the three metre-line

7. There is no objection to the insertion of dotted lines between the other lines, to represent half metres; but it is not advisable to prescribe this procedure and it should be applied only when absolutely necessary.

8. The Committee took note of the comment of the Bureau in reply to the proposal of the British Empire.

Great Britain's proposal was :

"The adoption of a more convenient symbol for the 6 fathom line which, in its present form, is cumbersome and difficult to delineate."

and the comment of the Bureau is as follows :

"The 6 fathom line, in Great Britain and the United States is represented by the symbol

--- --- ---

Considering that these two nations are the only ones to use that line, that the Argentine does not, and that Japan and the Netherlands, for charts of the East Indian Archipelago, have adopted the metric system, it appears to be indicated that these two nations should come to a direct understanding between themselves.

The Committee approved the proposal of the Dutch Delegate to point out to the Bureau that it is desirable that the 200 metre and 100 fathom lines should stand out more clearly, because these lines are important both from a geological and navigational point of view.

2. INDICATION OF CHANNELS DREDGED TO A CERTAIN DEPTH.

The Committee expressed the wish :

"that channels which have been *dredged* to a certain depth should be specially indicated as such whenever the sca of the chart permits it, with a note giving the *method of dredging* and the depth.

The following information should be inserted in the Sailing Directions also : "Channel dredged to... metres depth, in the year..."

3. COLOURING OF LIGHT SECTORS.

The Committee pointed out that :

"it is desirable that those States which can do so, should colour their charts in order to indicate the colours of the light sectors, in view of the fact that this method is practically perfect."

4. REFERENCE TO ADJOINING CHARTS.

The Committee considered that it would be advisable to adopt the rule that the numbers of adjacent charts should be indicated in the appropriate positions, or in case of complex arrangement, a skeleton index should be given.

5. STANDARDISATION OF TITLES OF CHARTS.

The Committee on Charts recommends the following provisions :

(1) that the geographical position should be given on plans and charts which are not graduated and that, with regard to graduated plans and charts, a simple reference as to the origin of longitudes should be given ;

(2) that the date of the survey be shown on charts ;

(3) that it be left for each nation to decide whether the names of ships and officers who took part in the survey should be mentioned ;

(4) that when a country invariably uses the metre, it is unnecessary to mention the unit of measurement of depths ;

(5) that a table of symbols need not be shown on the charts ;

(6) that magnetic variation should be omitted from the title when it is shown against the compass rose ;

(7) that whenever the projection is not Mercator's projection, this should be mentioned on the chart ;

(8) that the authority, date of surveys and foreign charts used, together with their numbers, when possible, should be mentioned ;

(9) that it is recommended, for nations which do not use the Latin alphabet, that an additional title of the chart should be printed in Roman characters ;

(10) that the enumeration of conspicuous objects is *desirable on large scale charts*.

The question as to whether sketches of conspicuous objects or a simple list of these should be inserted on large scale charts was decided in favour of giving the list only.

(11) that variation obtained by accurate magnetic observations, made at places near the coast and which may be useful to seamen, should be mentioned on the charts near such places or in the title."

6. STANDARDISATION OF DATING OF CHARTS.

The Committee decided to examine the question only as to the dates which should be mentioned on the charts and not as to the part of the chart where these should appear.

The Committee approved the proposal that the month and year of publication should be inserted on charts.

The Committee approved also a proposal to insert the month and year of publication of a new edition which replaces and cancels previous editions.

The Committee rejected the motion "that reprints, without new corrections, issued between the first publication and new editions, or between two new editions in order to complete the stock, should show the month and the year with the words "no new corrections."

The Committee decided :

"that charts should be brought up-to-date to the day when they leave the Hydrographic Office ;"

"that the date of correction by the Hydrographic Office should be shown on the charts ;"

"that charts should bear the date to which they have been corrected by the agent who sells them after they have left the Hydrographic Office."

7. DIMENSIONS OF CHARTS.

The Committee decided :

"that all countries should be asked to quote the dimensions between the inner border lines of their charts so that full use can be made of the material when used for compilation purposes. This applies especially to charts and plans which are not graduated."

8. *SEA LIMITS.*

Sweden withdrew the proposal as to "the possibility and means of showing sea limits of various kinds on specially printed charts."

9. *SPECIAL INDICATION OF NEW PART OF EXCHANGE COPIES OF CORRECTED CHARTS.*

The Committee proposed :

"that the new part on exchange copies of corrected charts should be specially indicated by a light-blue wash."

10. *INFORMATION CONCERNING DANGERS MARKED "P.D." & "E.D."*

The Committee voted on the following proposal :—

"The I. H. Bureau is requested to draw up a list of dangers marked. P. D. and E. D. on charts, each being accompanied by a short historical note. All States are invited to provide the Bureau with the information necessary for the preparation of this list".

No decision was reached as 6 voted for and 6 against the proposal and 1 abstained from voting.

11. *METHODS OF PRINTING CHARTS — REPRODUCTION — COPPER PLATES, ENGRAVING AND REPAIR. (*)*

The Committee recorded the agreement of all the Delegations that States Members should send to the Bureau all possible information concerning printing and reproduction of charts, engraving and repair of copper plates as well as the application of zincography and lithography in the preparation of charts.

This decision was approved in Plenary Session.

12. *ORIGINAL CHARTS.*

"The Committee considers it of the highest importance that the question of original charts should be thoroughly examined by the I. H. Bureau in order to allow these charts to come into general use. The Committee considered it advisable that practical experiments should be carried out, by the nations concerned, in well-defined zones, where geographical circumstances allow, and the experiments should be made on the basis of the principles used by Holland in 1925".

13. *SAFETY LANES AND DANGER ZONES.*

The Committee recommended that :

"some international Organisation, which may even not as yet be formed, be urged to take up the study of the delimitation of lanes of traffic and danger zones in much frequented waters."

14. *TIDAL INFORMATION TO BE GIVEN ON CHARTS. (*)*

The Conference limited itself to

"recommending a more general use, by mariners, of methods of prediction based on the use of harmonic constants; the information relative to tides which is to be shown on charts is left to the discretion of the various Hydrographic Offices whether or no they issue Tide Tables."

* This resolution was made by the Committee on Tides and was approved in Plenary Session.

15. *COPYRIGHT OF HYDROGRAPHIC PUBLICATIONS.*

The Committee expressed the wish that the resolution of the London Conference, mentioned below, should be more strictly applied in future.

"It is desirable that every Hydrographic Office should be free to reproduce, except in facsimile, all publications of other Hydrographic Offices, provided that such reproduction shall have printed on it a due acknowledgment of the original source from which it is derived."

16. *DEFINED ZONES WITHIN WHICH CHARTS SHOULD BE BASED ON THE SAME CONSTANTS. (**)*

The Committee on the Work of the Bureau agreed with the opinion expressed by the Directing Committee of the I. H. B., that this question concerns Hydrographic Offices only, that it is of no practical interest to navigators, that it should be left to each Office to solve, in accordance with its own requirements, and that no useful purpose would be served by attempting to find a general solution of the problem,

This approbation was ratified by the Plenary Session.

II. *RESOLUTIONS ON SAILING DIRECTIONS. (*)*

1. *INDICATION OF SOURCE AND DATE OF INFORMATION RELATIVE TO FOREIGN COASTS IN NATIONAL SAILING DIRECTIONS.*

The Committee recommended that :

(a) "it be clearly mentioned in partly non-original Sailing Directions which publications (with the year of issue) have been used or partly used for the compilation."

(b) "for the compilation of non-original or partly non-original Sailing Directions, those issued by the country described or issued by the Government which controls that country, be used."

2. *PUBLICATION OF AN INDEX-CHART OF ORIGINAL SAILING DIRECTIONS.*

The Committee recommended

"the publication of an index-chart of Original Sailing Directions for use with the index of original charts."

3. *TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS. (**)*

The Conference "considered that it would be better for the present to leave to States and Hydrographic Offices complete latitude in the drawing up of their Sailing Directions, in so far as concerns Tides, according to their usual custom and in the manner best suited to the practice of the mariners of their own nation."

4. *UNIFICATION OF TITLES OF PUBLICATIONS. (***)*

5. *OVERLAPPING OF HYDROGRAPHIC PUBLICATIONS. (***)*

6. *USE OF UNOFFICIAL PUBLICATIONS. (***)*

7. *BROADCASTING OF NAUTICAL INFORMATION. (***)*

(*) See Note on page 101.

(**) See Note re Nos 11 and 14 page 105.

(***) NOTE. — Subjects mentioned under 4, 5, 6 and 7, which appeared in the "Supplement to the Proposals" submitted to the Conference, were not examined by the Committee.

III. RESOLUTIONS CONCERNING LISTS OF LIGHTS. (**)

1. *ERRATUM IN THE REPORT OF PROCEEDINGS OF THE LONDON CONFERENCE OF 1919* (Section III, Sub-Section N, paragraph 2, page 35).

Lines 8 to 1 from the bottom of the page should read :

" Period is the interval between successive commencements of the phase
i. e. the time occupied by the exhibition of the entire system of changes included in that phase."

2. *RANGE OF VISIBILITY OF LIGHTS. (*)*

The Conference again recommended :

" that each country in which the relative positions of lighthouses and light ships allow observations of visibility of other lights to be made, should make these observations and send the data to the Bureau, in order that the percentages of visibility may be deduced for various distances.

After a thorough discussion on the method set out in the Lists of Lights under the title of " Range of visibility of lights", it is recommended to the countries concerned to study the system in use in France and Holland."

3. *BEARINGS TO BE GIVEN FROM SEAWARD IN THE LIST OF LIGHTS.*

" The bearings should be true and in degrees from 0° (North) to 360°, measured clockwise and given from seaward; the bearing limits of sectors and arcs of visibility should also be given from seaward."

4. *INFORMATION AS TO VARIOUS SIGNALS TO BE INSERTED IN THE LIST OF LIGHTS.*

The Committee adopted the proposal " to insert in an appropriate place in the List of Lights and only for those stations which are in proximity to lights the following lists :

- 1) list of lights;
- 2) list of international Signal Stations;
- 3) list of W. T. and D. F. stations;
- 4) list of signals with reference to ice and light-vessels;
- 5) list of Submarine signals.

5. *TABULAR METHOD OF COMPILATION OF THE LIST OF LIGHTS.*

Use of English or French in the Headings of Columns.

The Committee adopted the following Resolution :

" The introduction and headings of columns should be translated into English or French in such lists as are issued in languages other than English or French."

IV. RESOLUTIONS CONCERNING NOTICES TO MARINERS (**)

1. *LIMITS OF OCEANS AND SEAS.*

The Committee referred the study of this subject back to the Bureau, in order to obtain a solution of the question.

(*) This resolution was approved in Plenary Session.

(**) See Note on page 101.

2. *INSERTION IN NOTICES TO MARINERS OF ONE OR MORE BEARINGS FOR LOCATING POSITIONS.*

Great Britain withdrew the proposal put forward.

3. *PERIOD OF PREVIOUS NOTICE TO BE GIVEN BEFORE THE INSTALLATION OR ALTERATION OF AIDS TO NAVIGATION.*

The Committee considered that

"two months' previous notice should be given whenever practicable, of the installation of new aids to navigation or of alterations in those which exist".

4. *MENTION, IN NOTICES TO MARINERS, OF THE INTENTION TO ISSUE FURTHER NOTICE ON ANY SUBJECT.*

The Committee considered that :

"if it is intended to issue a further notice on any subject, the fact should be mentioned in the first or preliminary notice."

5. *NOTICES OF A TEMPORARY NATURE.*

The Committee expressed the following wish :

(a) "that Notices of a temporary nature should be so marked by each country ;

(b) "that each country should issue a monthly list of temporary Notices still in force."

6. *DISSEMINATION OF NOTICES ABROAD.*

1) The Committee expressed the following wish :

"that each country should send all its Notices to some centre in the principal foreign ports and that these Notices should be at the disposal of captains of vessels who wish to consult them."

2) The Committee considered the following question to be outside its province :

"to make this consultation compulsory and in the meantime to invite the Representatives of the States Members to bring the question before their National Marine Boards, and to impress these authorities with the importance of these consultations."

7. *TRANSLATION INTO ENGLISH OR FRENCH OF THE FIRST NOTICE TO MARINERS OF EACH YEAR ISSUED IN A LANGUAGE OTHER THAN ENGLISH OR FRENCH.*

The Committee was of opinion that :

"the first number of Notices to Mariners of each year should be translated into English or French and be printed in Roman characters."

8. *TABLE OF NAVIGATIONAL WARNINGS IN THE INTERNATIONAL CODE OF SIGNALS.*

The Committee referred this question to the Bureau.

Va. RESOLUTIONS CONCERNING CATALOGUES. (*)

1. *INSERTION IN CATALOGUES OF DATE OF LATEST CORRECTION.*

The opinion of the Committee was :

" that the insertion in the Catalogue of Charts of a column giving the month and year of the latest small correction might be useful but is not indispensable. "

2. *USE OF ENGLISH OR FRENCH IN PUBLICATIONS OTHER THAN THOSE IN ENGLISH OR FRENCH.*

The Committee considered that :

" the catalogues of Charts which are published in languages other than English or French should be translated into English or French in order that they may be read and understood by mariners of any nationality. The introduction, preface, headings of columns, *etc.*, at least should be translated into English or French, as is the case, for example, in the Swedish catalogue of charts. "

" The Committee thought it desirable that an English or French summary be given of any publication issued by a Hydrographic Office to draw attention thereto. "

" The Committee decided that any interesting publication concerning Hydrography might be published in French and in English by the International Hydrographic Bureau, permission to reproduce having first been obtained from the authors. "

3. *PUBLICATION OF A CATALOGUE OF ORIGINAL CHARTS.*

The Committee decided to refer the publication of this Catalogue to the International Hydrographic Bureau.

E. — RESOLUTIONS CONCERNING TIDES.

(The Report of the Committee on Tides was approved by the Conference).

1. *INFORMATION CONCERNING TIDES WHICH SHOULD BE INSERTED ON CHARTS.*

In the present condition of practical study of the tides, the Conference confined itself :

" to recommending a more general use by mariners of methods of prediction based on the use of harmonic constants ; the information relative to tides which is to be shown on charts is left to the discretion of the various Hydrographic Offices whether or not they issue Tide Tables. "

2. *INFORMATION CONCERNING TIDES WHICH SHOULD APPEAR IN SAILING DIRECTIONS.*

On account of the special difficulties still encountered in practice in making a perfectly clear classification of the various groups of tides, the Conference :

(*) See Note on page 101.

" considers that it would be better for the present to leave to States and Hydrographic Offices complete latitude in the drawing up of their Sailing Directions in so far as concerns Tides according to their usual custom and in the manner best suited to the practice of the mariners of their own nation."

3. *USE BY THE MARINER OF HARMONIC CONSTANTS FOR THE PREDICTION OF TIDES AND METHOD OF PREDICTION.*

The Conference expressed the desire that the mariner become more familiar with the use in practice of harmonic constants for the prediction of tides, it being left to each Service, or to each user, to choose the method which appears most practicable.

4. *PUBLICATION BY THE INTERNATIONAL HYDROGRAPHIC BUREAU OF A VOLUME CONTAINING THE HARMONIC CONSTANTS OF THE WORLD.*

The Conference recommended :

" the publication by the International Hydrographic Bureau of a volume containing harmonic constants for the whole world.

This basic volume should be kept up to date by the issue of an annual supplement.

The definite arrangement of this publication shall be determined by the I. H. B. as soon as possible after obtaining authoritative opinions from the Offices interested.

All detailed information as to observations and the period during which they were made should be provided.

The I. H. B. shall make every effort to procure from the Administrations interested the Constants for the places for which they have not yet been published.

5. *ESTABLISHMENT OF AN INTERNATIONAL LOW WATER DATUM FOR MARINE CHARTS AND TIDE TABLES.*

After an exchange of opinion upon the necessity of establishing such a datum in the neighbourhood of the lowest Low Water of the year, so that the Tide only rarely falls below the level selected, and upon the manner in which such a datum could be deduced from the observations themselves or from the Harmonic Constants which emerge from such observations, the Conference considers that, under present conditions of the study and analysis of tides, too strict a formula of calculation is not possible and that it would appear necessary to consider as sufficient the following general definition of the datum :

" Tidal datum should be the same as Chart Datum, and should be a plane so low that the tide will but seldom fall below it."

Moreover, the Conference expressed the wish :

" that it is necessary to show clearly on charts and in Tide Tables, a reference to mean sea level of the datum of reduction for soundings."

6. *TRANSLATION OF HEADINGS, ETC., OF TIDE TABLES.*

The Conference recommended :

" principally for Tide Tables which are not published in Roman characters, that summary indications, in English or in French for example, should appear in the headings of divisions or of columns so as to render the use of such publications more international."

F. — MISCELLANEOUS RESOLUTIONS

(Plenary Session)

1. *TRANSCRIPTION OF GEOGRAPHICAL NAMES.*

The Conference, in Plenary Session, rejected the following proposal made by the Bureau :

“ that the Representatives of the States Members will request the Authorities in charge of the transcription of the geographical names in countries using characters other than Roman, to supply to the Bureau the data which will enable it to comply with the Resolution of the London Conference 1919, which states that the I. H. B. should prepare an international system of transliteration and transcription of names for those countries.”

2. *DISTINGUISHING SIGNALS FOR SURVEYING VESSELS.*

The Conference expressed the wish that a distinguishing signal be adopted. This question should be put on the Agenda of the next Maritime Conference.

3. *BUOYAGE.*

4. *COLOURS OF HARBOUR LIGHTS ON BREAKWATERS.*

5. *SIGNALS IN GENERAL.*

6. *PORT SIGNALS.*

As the subjects mentioned in paragraph (3) to (6) inclusive are still being discussed by the Technical Committee of the Sub-Committee for Ports and Maritime Navigation of the Advisory and Technical Committee for Communications and Transit of the League of Nations, the Bureau abstained, for the moment, from making comments on these subjects, until the result of the discussions of this Committee has been brought to its knowledge.

As it is proposed to convene a special International Conference on Buoyage, *etc.*, under the auspices of the League of Nations, the Bureau suggested that these subjects should not be included in the agenda of the Hydrographic Conference in order to prevent duplication of work.

The Conference decided in consequence that the organisations which are now dealing with these questions should continue to deal with them, without any opinion being expressed on the matter by the present Conference. Thus this Conference will not consider the proposal made by Japan on the subject of unification of harbour lights on breakwaters.

7. *STANDARD CATALOGUE OF MARITIME GEOGRAPHICAL POSITIONS.*

The Conference decided that the I. H. B.

“ should draw up a plan for the compilation of a standard catalogue of Maritime Geographical Positions for the benefit of Hydrography and Navigation.”

8. *FACILITATING VISITS OF STUDENTS.*

The Conference considered that the exchange of visits between Hydrographic Offices would be beneficial to their personnel.

9. *MEASURES TO PROCURE GOOD HYDROGRAPHIC LITERATURE.*

The Conference decided that "the Bureau should draw up and publish the necessary regulations for the writing of a series of articles for which prizes or medals would be given."

10. *CHARGES FOR RADIO BEARINGS.*

The Conference.

"instructed the International Hydrographic Bureau to endeavour, through the Hydrographers, to cause charges for Radio Compass bearings to be discontinued."

RESOLUTIONS CONCERNING HYDROGRAPHIC SURVEYS, etc.

(*Plenary Session*)

1. *USE OF AIRCRAFT FOR HYDROGRAPHIC SURVEYS.*

(1) The Conference recommended :

"that those nations which use aerial photography for surveying, and have not yet sent reports on the subject to the Bureau, should do so."

(2) The Conference rejected the Proposal :

"that an agreement be arrived at among States Members with the provision that no air survey for hydrographic purposes be conducted outside their respective national boundaries."

2. *SOUNDING BY SWEEPING AND BY ECHO.*

The Conference expressed the desire that :

"those nations which employ sounding by sweeping or by echo, and which have not yet sent reports or publications on these subjects to the Bureau, should do so."

3. *INITIATING SURVEYS OF COASTS INSUFFICIENTLY SURVEYED.*

The Conference requested the Bureau to examine the means of undertaking hydrographic surveys in countries the coasts of which have been insufficiently surveyed.

The Conference proposed, for example, that charts concerning the "Progress of Hydrography" be published, even if the information available for the moment is not yet complete.

VARIOUS WISHES EXPRESSED DURING THE CONFERENCE.

(*Plenary Session*)

1. *ADOPTION OF RESOLUTIONS OF HYDROGRAPHIC CONFERENCES.*

The Bureau should endeavour to study and classify the Publications and Charts and report to future Conferences as to the non-execution by States Members of Resolutions adopted at a Conference.

2. *RAPID DISSEMINATION OF PUBLICATIONS.*

The Conference expressed the view that it would be of great assistance if the various States Members could be convinced of the importance of des-

patching new editions of charts and navigational books as soon as possible after publication.

3. *REQUEST FOR INFORMATION CONCERNING THE WORK PRESCRIBED BY ARTICLE 9 OF THE STATUTES.*

The Conference expressed the view :

"that it is desirable that the Representatives of the States Members should kindly furnish to the Bureau all necessary information asked for by the Bureau, in order to allow the Directors to undertake the principal work enumerated in Article 9 of the Statutes."

4. *ORGANISATION OF FUTURE CONFERENCES.*

The Conference expressed the wish :

"that future Conferences should be organised in such a way as regards Committees, estimation of the necessary duration, number of members of each Delegation, the timely sending of proposals by the Bureau, that thorough treatment of all subjects be possible."

5. *SUPPLEMENTARY CONFERENCE.*

The Conference decided :

"that a Supplementary Conference should take place in the Spring of 1929 i. e. two and half years after the present Conference, to which would be referred the examination of all the questions the full discussion of which has not been possible now, and also the questions which may arise in the interval.

The Directing Committee should provide for the cost of this Conference by reducing the expenses in other directions.

The Heads of Hydrographic Offices and their Assistants should attend this Conference if possible.

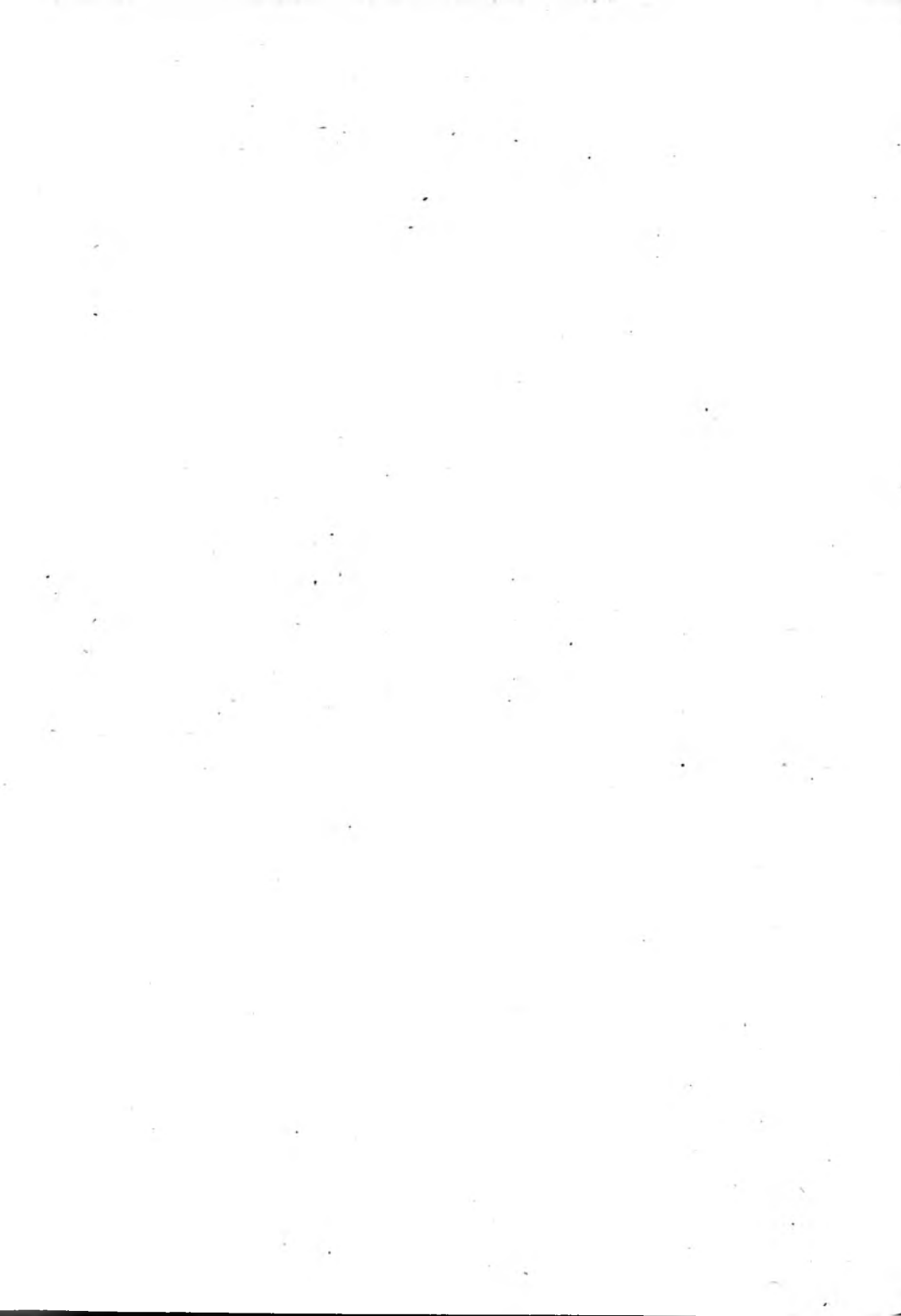
6. *TRANSFER OF THE SEAT OF THE BUREAU.*

The Conference :

"instructs the new Directors to study all possible information with regard to the proposal to transfer to Malaga and submit it to the States Members. The question of moving the seat of the International Hydrographic Bureau to Malaga should be the object of a thorough investigation which should include Monaco and Malaga, and finally a report should be sent to the States Members for the purpose of obtaining their decision."

7. *DESPATCH OF PUBLICATIONS BY THE BUREAU.*

The Conference expressed the wish that publications and Circular Letters for the more distant countries should be posted as early as possible by the Bureau.



PART II.

REPORTS OF THE PLENARY SESSIONS OF THE SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE

CHAPTER I.

The first Plenary Session was held at 1430, on Tuesday 26th October 1926.

Admiral Phaff (President of the Directing Committee of the I. H. B.) was in the Chair.

The Chairman. — H. S. H. the Prince of Monaco has, in his opening speech this morning, welcomed you all to the Principality, and offered his best wishes for the success of our Conference.

In the name of the Directing Committee of the International Hydrographic Bureau, I am pleased to renew the same greetings and wishes, and I am glad to announce to the Conference the happy news that Germany joined the Bureau on Saturday last. I therefore address my wishes more particularly to the Delegates who, though not representing Members of the Bureau, have kindly accepted the invitation to attend the Conference and also to the Delegates of Germany and Poland, the new Members of the International Hydrographic Bureau.

Out of twenty-two States Members, Siam has informed the Bureau that it would not take part in the Conference. So the following States are here represented: Argentine, Brazil, Chile, China, Denmark, Egypt, France, Germany, Great Britain, Greece, Italy, Japan, Monaco, Netherlands, Norway, Peru, Poland, Portugal, Spain, Sweden and the United States of America, represented by thirty-eight Delegates.

With the approval of at least two thirds of the States Members, the League of Nations and fourteen Nations or Dominions have been invited to attend the Conference. Finland, Mexico, Newfoundland and South Africa declined the invitation, Bulgaria, Canada, Ireland, New Zealand, Roumania, Russia, Turkey, Uruguay, and Yugo-Slavia made no reply, and the League of Nations and British India are represented by four Delegates.

The Conference has a double object.

In the first place, that of discussing the questions contained in the book entitled "Proposals submitted for Discussion" and in the "Supplement" to it, duly dispatched to the States, and secondly that of deciding on the organisation and management of the International Hydrographic Bureau.

The propositions which have to be discussed by the Conference are rather numerous.

In the above mentioned volume, they have been classified, as far as possible, in accordance with their previous classification in London, 1919, and the Conference will decide whether the proposals contained in each Section are sufficiently numerous or important to require Special Committees for their discussion.

The Statutes provide for the appointment of two small Committees, one with a view to examine the work done by the Bureau, and the other to control the management of its finance.

Considering that these Committees affect the organisation of the International Bureau the Delegates of the States Members only are entitled to attend them, in accordance with the provisions of Art. 57 (b) of the Statutes.

We can now proceed to the election of a President and Vice-President, who will make further suggestions as to the programme to be followed by the Conference.

In accordance with Art. 57 (a) and (b), each Delegation, whether it represents a State Member of the Bureau or one which has been invited, shall have one vote only for the election of the President and Vice-President. It is provided by Art. 58 (a), that on the first cast the decision will rest with the absolute majority of votes, which majority is twelve, and by Art. 58 (b) that on the second cast it will rest with the relative majority, provided that more than half of the Delegations have voted.

Does anyone wish to speak?

Captain Schweppe (Germany). — Gentlemen, in the name of my Government and of the German people I take this opportunity of thanking you very much for the welcome we have received here. It is now about a year since the German Hydrographic Office began to correspond with the International Hydrographic Bureau, and since that time we have studied the work done here and have seen that the methods of work and the lines followed by the Bureau correspond to a high degree with our own opinions on these matters, and we can therefore assure you that the German Hydrographic Office will do all in its power to co-operate in the work done here — work that, as far as we can see, will be of extreme benefit to the whole of mankind.

(Applause).

ELECTION OF THE PRESIDENT AND VICE-PRESIDENT.

Captain Luymes (Netherlands). — I propose that M. Fichot, the Head of the French Hydrographic Service, be asked to be so kind as to be a candidate for the Presidency of the Conference.

Thus, we could, in his person, do honour to France, where the idea of permanent co-operation in the sphere of hydrography was initiated, and M. Fichot, in consenting to preside over our work, would take a leading part in this Conference, as was done by his regretted predecessor, M. Renaud, whom we will never forget and who directed the work of the Conferences of St. Petersburg in 1912 and of London in 1919.

Captain Bjørset (Norway). — I agree with Captain Luymes' proposal, but with respect to the question of language, I think it will be difficult if we have to translate everything. I think this matter should be based principally on the English language, this year at any rate.

The Chairman. — The language question will be answered by the Conference itself when it has elected its Officers. As temporary President, I have not the necessary authority to put forward to you proposals on this subject. Therefore I request Captain Bjørset to make his proposal again when the Officers of the Conference have been appointed.

M. Fichot (France). — I heartily thank Captain Luymes for the proposal which he has kindly made, but I cannot help having somewhat similar

thoughts as has Captain Björset. The difficulty with which I speak, and even sometimes understand, English might present an obstacle in the way of usefully directing your discussion; therefore if someone could propose a candidate who can better fulfil this requirement of the easy use of the two official languages of the Conference, I should be the first to second him. I am, however, deeply touched by the proposal made with reference to me and particularly by the words which accompanied it with reference to France.

The Chairman. — Does any other Delegate want to propose anyone as President?

Captain Douglas (Great Britain). — I would suggest if I may that the question of language is very important indeed, and I should like to propose for the consideration of the Conference that a Delegate who can speak and understand both languages should be chosen.

The Chairman. — Will Captain Douglas kindly make a proposal on the subject?

Captain Douglas (Great Britain). — I am afraid that is a difficult task as I have not yet had an opportunity of learning the accomplishments of all the Delegates, but I suggest for the moment Captain Crosley, the United States Delegate, as I believe I am correct in stating that he not only understands but speaks French, and of course he is also a master of the English language.

The Chairman. — Then Captain Douglas proposes Captain Crosley as President of this Conference. Is this proposal seconded by any Delegate?

The proposal was seconded by the Greek Delegation and by Captain Caballero y Lastres (Peru).

Captain Crosley (United States). — I should not wish the Delegates to be under a false impression regarding my merits. It is true that I understand French well and speak some, but I only speak English comparatively well. (*Laughter*).

The Chairman. — The question thus becomes somewhat complicated. However, we must elect a President of this Conference and there surely is amongst you, Gentlemen, some one who speaks English and French; I hope that you will succeed in finding him.

Professor Odon de Buen (Spain). — Cannot we elect as our President Admiral Phaff; he has our entire confidence and speaks English and French very well?

The Chairman. — You are very kind indeed. Is this seconded?

The proposal was seconded by Commander Gerken (Chile).

M. Fichot (France). — I should have made the same proposal if I had not been forestalled by Professor Odon de Buen. Admiral Phaff speaks French admirably; he expresses himself with great ease in English. He is thus clearly designated to preside over our work and I gladly second the proposal just made.

The Chairman. — The motion having been properly presented, we will pass to the vote for the appointment of the President.

Will Captain Schweppe, Captain de Oliveira Sampaio and Commander Gerken kindly be the tellers?

Lieut-Commander Milne-Henderson (British India). — As Delegate for British India, I feel I ought to mention that India is not a Member of the International Hydrographic Bureau, but I believe that British India has a vote in the election of the President and Vice-President. I do not quite understand; is it only from the Delegates that we have to select the President? It has occurred to me that your own name has been proposed as President: is the President elected from the Delegates only?

The Chairman. — The Statutes say nothing about the choice of the President, and the Conference is absolutely free to do what the Conference desires and what the Conference wishes. If you wish me to lay the question before the Conference we will stop the elections and postpone them until the question has been decided.

The elections were proceeded with.

Commander Brandon (Great Britain). — Mr. Chairman, may I ask whether there are three names before the Conference or whether there is only one name? Three names have been mentioned and I am not quite clear — and other Delegates are not clear either — whether a choice of three names is before the Conference or whether the last proposition only is before us.

The Chairman. — I have said that the Conference is absolutely free to do what it chooses. I did not propose three special names. Anyone can name any Delegate he wishes.

Captain Bjørset (Norway). — May I refer to Art. 5 (b) of the Statutes (1923) which reads as follows:

“The Members of the Directing Committee and the Secretary General will hold themselves at the disposal of these Committees, the findings of which shall be submitted to the Conference”.

I should have taken these words to mean that the President of the Bureau could not be chosen as President of the Conference?

The Chairman. — To that I should like to say that according to this Article the first man at the disposal of the Conference is its President, so that I think it can be arranged that the President of the Conference is at its disposal as well as the President of the Directing Committee of the Hydrographic Bureau. If the Conference objects then of course I will conform to Captain Bjørset's proposal.

No objections were raised, and the voting continued.

The Chairman. — The results of the ballot are as follows:

Admiral Phaff :	11 votes.
Captain Crosley :	7 votes.
Blank :	3 votes.

The Conference has therefore decided that I am to be the President. I thank you for the confidence shown me, and thank you not only in my own name but also in the name of the International Hydrographic Bureau. We will now continue elections and choose a Vice-President. Does any Delegate want to make a proposal?

Professor O. de Buen (Spain). — I propose, as a candidate for the Vice-Presidency, Captain Crosley.

The Chairman. — The tellers announce the following results:

Captain Crosley :	14 votes.
M. Fichot :	3 votes.
Commander Warburg :	1 vote.
Blank :	3 votes.

Captain Crosley has been elected Vice-President. (*Applause*).

Captain Crosley (United States). — I thank you and will attempt to speak in French. (*Laughter*).

The Chairman. — The session will be suspended for a quarter of an hour.

The meeting adjourned at 1520.

At 1535 the meeting resumed business.

ELECTION OF THE SECRETARY OF THE CONFERENCE.

The President. — The first question is that of language, after voting for the Secretary of the Conference. Captain Crosley and I propose that Captain Spicer-Simson, Secretary General of the Hydrographic Bureau shall be Secretary of the Conference because he speaks French and English to perfection and knows everything that is going on in the Bureau and all preparations which have been made for the Conference. I hope you will be unanimous in naming him Secretary General of this Conference.

Captain Spicer-Simson was elected by acclamation; and the **President** made the official announcement which was warmly applauded.

LANGUAGES TO BE USED AT THE CONFERENCE.

The President. — Now for the question of languages. Will Captain Björset kindly repeat his proposal?

Captain Björset (Norway). — I have nothing further to say beyond this, namely that I regard it as a matter of course that the deliberations shall continue to be mainly in English: most of the Delegates can best express themselves in that language, and as there will be translations afterwards, every difficulty is done away with. I propose that English should be the leading language during the Conference.

The President called on M. Fichot to speak on the subject.

M. Fichot (France). — The proposal which we have just heard is absolutely opposed to the provisions of the Statutes.

There is, amongst us, a representative of the League of Nations and it seems desirable to have his opinion on this question. At the League of Nations there are two official languages, English and French, which are therefore also the official languages of the International Hydrographic Bureau. It appears to me to be absolutely anti-statutory to decide that the discussions at this Conference shall be carried out in English only; besides, if I rightly understand the purport of the proposal just made by the honourable Delegate of Norway, this would have the effect of excluding the French Delegation from the deliberations of the Conference. I do not think that this is his desire. We should therefore keep within the terms of the Statutes which lay down that French, on the same footing as English, is an official language of the International Hydrographic Bureau.

The President. — May I read what the Vice-President, the President and the Secretary General think on the question?

Moreover, the Chair would wish to inquire into the following points:

— Which languages will be used by the Conference? Will they be English and French, since Art. 21 (a) states that these two languages are those adopted by the Bureau, or will each Delegate be at liberty to make use of the language which is most familiar to him?

The Officers of the Conference wish to point out to the Conference, that the greater the number of languages used, the longer the discussions are likely to last. It seems to the Chair that the Delegates have a right to demand that the speeches be made in or translated into at least one of the two official languages of the Bureau, and possibly some Delegates might even demand that translation be made into both languages. You can easily realise therefore what delay might result from the acceptance of several languages; as it is, a great effort will be needed and a long time required to meet the requirements of two languages. The interpreters engaged by the Directing Committee can translate the English speeches into French and the French into English. Should the Conference think it advisable to make use of more lan-

guages, the Directing Committee of the International Hydrographic Bureau would endeavour to supply competent persons to assist them for such languages as soon as possible.

As Mr. Harada, of the League of Nations, is here and M. Fichot has appealed to him for advice, I should be glad if he would give us his opinion on the subject.

Mr. Harada (League of Nations). — Mr. President, I do not think that I can give an opinion on the question, it is for the Conference to decide which language should be used, but I may perhaps be allowed to mention that the League of Nations uses the two languages on an absolutely equal footing.

M. Butavand (Monaco). — I agree fully with the opinion expressed by the Hon. Delegate of the French Republic, M. Fichot.

I venture to add that I have had the honour of assisting in the work of the League of Nations where I have noted that, as has just been said by the Hon. Delegate of the League of Nations, the French and English languages are treated as being on exactly the same footing. Thus, in a Committee whose President was a Frenchman and whose Vice-President was a representative of India, the Members spoke either English or French, their speeches were translated immediately and the discussions were carried on quite well.

In addition, I desire, most amicably, to direct attention to the fact that the official language of the country in which we are now is French; I cannot therefore support a motion which would tend to cause the English language to be exclusively used here.

The President. — Here we have various proposals and from the discussions which have ensued the Officers of the Conference have drafted a proposal that French and English shall be the languages of the Conference and that every speech shall be translated from one language into the other as it is made. Shall we vote on this proposal?

Admiral Niblack (Director of the I. H. B.). — Mr. President, I think that the question has been misunderstood. In the Statutes it is laid down absolutely that French and English are on equal terms. A difficulty has arisen where in reality there is no difficulty. We are discussing at present whether anybody can get up and speak in — for instance — German, in which case we must have special interpreters. The Statutes of the Bureau prescribe French and English, so you cannot raise that question. The actual question is whether a Delegate shall be allowed to speak in his own language and whether in that case we shall employ special interpreters.

The President. — It seems, Gentlemen, that the wording of my English has given rise to some confusion, so I will ask the Vice-President to give you in plain and good English what I have not been able to put into clear language.

The Vice-President. — It is the intention of the Officers of the Conference to use French and English, and French and English only. If any Delegate wishes to have something translated or interpreted into his own language he may have it done. Is there any further doubt?

The President. — I think everyone has understood now. Does anyone wish to speak? Does anyone wish to vote?

No reply.

The President. — Then French and English are the official language of the Conference.

APPOINTMENT OF COMMITTEES

The President. — Owing to the small number of proposals contained in each Section of the Volume "Proposals submitted for discussion" and its "Supplement", a great part of which are of minor importance, the newly

elected President and Vice-President suggest that no special Committees should be appointed for their discussion, considering moreover that most of them have been amply dealt with in the above-mentioned book.

Any alteration necessary to the text can be made in a Plenary Session directly, and this would also go towards rendering the work of the Conference easier and quicker.

Are there any objections?

Captain Douglas (Great Britain). — Mr. President, I do not think I have quite understood the exact meaning of your remarks. Are there to be no Committees whatever?

The President. — No Committees on the subjects mentioned in the book, that is: Charts, Sailing Directions and Light Lists. The Committees which have been prescribed by the Statutes will sit.

Captain Douglas (Great Britain). — Are "Tides" included?

The President. — I want to propose that specially. No further remarks?

Captain Luymes (Netherlands). — Your intention is also not to have a Committee for the Statutes?

The President. — Yes, certainly. Two Committees are named in the Statutes; a third Committee, unprovided for in the Statutes, is to be set up for the examination of the Statutes in view of the fact that many important changes have been made. This would entail long discussions, therefore it is useful to have these changes examined beforehand by a Committee. Owing to previous insight in the matter the Delegates of the States Members only are entitled to form such a Committee. No objections to naming a Committee on the Statutes?

Commander Brandon (Great Britain). — May I ask exactly what Committees it is proposed to appoint? The full list of the Committees is rather difficult to understand. What at present are the four Committees? Could they be named and the reason for each given afterwards?

The President. — Gentlemen, the Vice-President will now make known to the Conference the list of Committees which the Chair proposes that you should form.

The Vice-President.

Finance,
Statutes,
Work of the Bureau, and later:
Special Committee on Tides.

The Committee which it has been suggested should be added to those already existing, is the one on Statutes.

The President. — Now who will propose a Special Committee for Tides? In this Committee any Delegate — whether a Member of the Bureau or invited — can take part. As I feel sure there are many special experts on Tides here present I hope the Committee will be numerous and the work a great success. Are there any objections to a Committee on Tides?

Commodore Reinius (Sweden). — Gentlemen, I think it would be better instead of inviting all Members to the Special Committee on Tides, to appoint a Special Committee for Charts, Sailing Directions, Notices to Mariners and List of Lights.

The President. — I do not think there is any need to propose further Committees as this question has been settled by the Congress, their decision being that we are to have no other Committee beyond the two named in the Statutes, that is one on Statutes and one on Tides. I think therefore that it

should not change our decision. The Secretary General will now ask each Delegate to give his name and the Committee on which he wishes to work.

The Vice-President, in order to avoid any possible misunderstanding, again read the names of the four Committees in question, and stated that Delegates would now have an opportunity of saying on which Committee they preferred to work. Should all prefer the same one it was clear they could not all be on it.

Captain Douglas (Great Britain). — Mr. President, I do not understand from what has gone before that it has been put to the Delegates that these Committees are accepted.

The President. — No objections were raised. I asked whether anyone had any objections. If Captain Douglas had wished to vote I should have been pleased to put it to the vote.

Commodore Reinius (Sweden). — I think that many of the Delegates — myself among the number — did not catch that the decision provided for four Committees only.

The President. — I will read this out again: Owing to the small number of proposals contained in each section of the Volume "Proposals submitted for discussion" and its "Supplement", a great part of which are of minor importance, the newly-elected President and Vice-President suggest that no special Committees should be appointed for their discussion, considering moreover that most of them have been amply dealt with in the above-mentioned book.

As there were no objections I considered the matter closed. Does anyone wish to reopen the subject?

Captain Björset (Norway). — I agree with Commodore Reinius with respect to his proposing a Special Committee for Charts, it is a big and technical subject and it is obvious that we shall not obtain good results unless the details have been discussed beforehand by a Special Committee. After that we can bring the results before the Plenary Meeting.

M. Richards (Egypt). — I agree entirely with Captain Björset. I think it would be a waste of time to discuss Charts in a Plenary Session; it is too big a question and I think it would be a good idea to have a Special Committee on Charts to go into the question thoroughly and to report to the Plenary Meeting.

Commodore Reinius (Sweden). — I agree with the last two speakers.

The President. — Since three Delegates are in favour of a Special Committee on Charts we will vote on it, and the vote will be by show of hands. The Motion is that we shall have a Special Committee on Charts.

The vote was taken: the result being a majority in favour.

The President. — The majority of the Conference is in favour; we shall therefore name a Special Committee on Charts and request the Heads of Delegations to inscribe their names on a new list which the Secretary General will present to you.

We have now the names of those Delegates who want to participate in the various Committees, but the names of the Delegates for the Charts Committee is not complete as yet. Will those Delegates who wish to sit on the Charts Committee kindly stand up so that we can take their names.

This request was acceded to and the names were taken.

The President. — So many Delegates want to take part that it will not be possible to give them seats on all the Committees, but the Vice-President, the Secretary and myself will try and arrange things for you. We will now adjourn until tomorrow morning when the Meeting will open at 0930.

The Meeting rose at 1630.

CHAPTER II.

The second Plenary Session was held on Wednesday, 27th October 1926, the President in the Chair.

THE COMPLETION OF THE FORMATION OF THE COMMITTEES.

The sitting opened at 0945.

The President. — Yesterday's report has not yet been typed. It will be circulated, and Delegates will be asked to correct it as soon as possible and return it to the Secretary General.

The Polish Delegate, Lieut. G. Klossowski, has arrived, and is welcomed to the Conference.

We now announce the Committees by inviting attention to the lists you find on your desks and you are requested to add the name of Commodore G. P. Reinius to the Finance Committee, and the names of the Chinese Delegates to the Chart Committee and my name to the Tides Committee.

The Chair requests the Charts Committee to include in their deliberations the following subjects: Sailing Directions, Light Lists, Notices to Mariners and Catalogues, so that they will have to deal with pp. 1-44 inclusive, of the volume of *Proposals* and pp. 7-10 of the *Supplementary proposals*.

Are there any objections?

M. Fichot (France). — I request that the name of Commander Croissandeau, who has special charge of questions relative to charts in the French Hydrographic Office, be added to the list of Members of the Charts Committee.

The President. — If there are no objections Captain Croissandeau will be put on the list.

Are there any objections or comments on including, in the work of the Chart Committee, the technical subjects: Sailing Directions, Light Lists, Notices to Mariners, and Catalogues?

No objections raised.

As Section VIII of "Proposals made" is all closely related to Statutes that Committee is requested to consider this section.

No objections raised.

The Chair requests the Finance Committee to consider a report upon Section IX of the "Proposals": "Arrears of Contributions".

(Adopted).

The Chair requests the Statutes Committee to include a report upon the personal statements of the Directors pp. 140-151 of the *Proposals*.

(Adopted).

Captain Douglas (Great Britain). — Before proceeding to the election of the Committees may I rise on a point of order. Referring to the Statutes of 1923, p. 20, Article 59, paragraph (iv), we are promised two lists showing the candidates for the Directorships and it is added that "a copy of the notes referred to in paragraph (ii) will be presented to each Delegation at the opening of the Conference"; this applies also to the candidates for the post of Secre-

tary General. I do not think those lists have been distributed yet and I think I might say that it will help the Delegates to have the lists.

The Secretary General. — I wish to make a personal explanation in connection with this, which is that Captain Tonta put forward his candidature for a directorship just in time, and only just in time. He sent a statement of his services in Italian and we could not get a part of it translated owing to the technical terms employed; we had, therefore, to request him to send it in one of the languages of the Bureau. It was received again on Saturday and was translated immediately into the other language of the Bureau and sent to the printers. We are expecting the complete proofs from the printers this afternoon.

Admiral Niblack (Director of the I. H. B.). — In connection with the formation of Committees there is possibly also to be a Committee later on to examine the list of candidates and their qualifications. There are several other Committees and under the Statutes the Members of the Directing Committee and the Secretary General all hold themselves at the disposal of these Committees, the findings of which will be later submitted to the Conference. I do not wish to put my name on any of the Committees but I would like to ask permission from their Chairman to be present at certain of their Committee meetings.

M. Fichot (France). — I do not know whether the Statutes provide for the formation of such a Committee. Personally, I see no objection to the elections being preceded by a discussion of the qualifications of all the candidates. But it is indispensable that the Committee in which this discussion will take place shall consist of all those who have the right to vote, namely of all the Heads of Delegations.

The President. — The Chair thinks there is a misunderstanding. M. Fichot spoke of the examination of the qualifications of candidates and this question will be discussed when the list of candidates has been handed round. As Admiral Niblack is a Director of the Bureau, he is available under the Statutes to assist at all Committees, which he has stated he will be glad to do.

Admiral Niblack (Director of the I. H. B.). — I merely ask this: — Admiral Phaff, who is also a Director of the Bureau, has put his name on the list of a Committee as a Member. Now I have not the same privilege for some reason, so I merely state that I reserve the right to ask of the Chairman of any Committee to let me go before his Committee with some subjects that I wish also to discuss. I should have the same privilege as another Director.

The President. — Permission is granted.

The sitting was suspended for the formation of the Committees.

On resuming.

The President. — Mr. Zacharias has removed his name from the Committee on the Work of the Bureau.

Commander Haselfoot has added his name to the Technical Documents Committee.

In view of the large number of Delegates on four of the Committees, it is not possible for them to meet at the same time. The Chair expects that every Committee will form sub-Committees for the discussion of minor subjects and arrange for meetings in such a manner that as little time as possible will be lost.

Since many subjects have been assigned to the Committees, the Plenary Session will then have to deal with Sections 5 (b) and 7 of the "Proposals", and the part "General" of the Supplement.

The Japanese Delegation desires to make a communication to the Conference.

Captain Hori (Japan). — In the name of the Japanese Government which we represent at this Conference, we express our deep thanks for the the sympathetic assistance given to the Hydrographic Service of Japan by the International Hydrographic Bureau and by the Hydrographic Offices of the various States at the time of the earthquake of September 1923. It does not appear to us to be entirely inopportune and we believe that it is our duty to give here a short description of the damage suffered by our Hydrographic Office, as well as of that which has happened since then.

The earthquake, and the fire which followed, destroyed and burnt nearly all the Offices of our Hydrographic Service, with the exception of a single store which contained part of the hydrographic surveying instruments and a certain quantity of material. Of this damage, that which we mourned the most was the loss of every single copper chart-plate and of all original sheets of the hydrographic surveys which we had gathered together thanks to an effort continued during the last half century. The original copies of the charts and books which were in course of preparation were also entirely lost.

Since then, by all possible means, we have earnestly tried to reprint and publish the charts and books; in spite of the very difficult circumstances, aggravated by the destruction of most of the private printing establishments of the capital, we have been able to continue this work of restoration and to-day we are provided with sufficient means to remake nearly all that we had at the time of the catastrophe. In all this difficult period our work has been much facilitated by the sympathy, and gifts of all sorts — of charts, of books, of valuable data — received from the International Hydrographic Bureau and from the Hydrographic Offices of the various States.

Under the circumstances, we are at present not yet able to work at full blast as is desirable, and we regret it very much. However, thanks to the extraordinary efforts put forth by the present staff, this state of affairs will not last long.

Seizing the opportunity offered by this meeting, we have brought with us a few copies of our recent works (English text) which were specially prepared for you. We have asked the Bureau to distribute them.

They are :

1. Bulletin of the Japanese Hydrographic Service for 1926, containing "Magnetic Survey".
2. Catalogue of Publications.
3. Charts showing the depth of the seas adjacent to Japan.
4. Chart drawn from the Hydrographic Survey of the seismic area of 1923.
5. Sun observations at low altitudes.
6. New method of computation in astronomical navigation.
7. Photograph of a model constructed for the study of currents in Tsugaru Straits.
8. Depression of the sea-horizon.
9. Atmospheric pressure over the Ocean.

Some of these documents have not yet arrived, they were held up by the Customs at Marseilles, but they will be received very shortly.

The President. — I will announce the programme for this week. It will be published to-morrow and distributed.
(*Programme for the week was then read.*)

We now adjourn till Tuesday, 2nd November, for a Plenary Session at 0930, unless any Delegate has anything to say.

Commander Warburg (Great Britain). — Do I understand that the arrangement is that there shall be no meeting of the Tides Committee until next Tuesday?

The President. — It has been announced that the Tides Committee will meet later, but also that, since many subjects have been assigned to Committees, the Chairmen themselves will have to arrange their meetings. The Chair expects each Committee to form sub-Committees for the discussion of minor subjects and to arrange for meetings in such a manner that as little time as possible shall be lost, as has been announced.

M. Fichot (France). — I would like to know in which room the meetings of the Tides Committee will take place, for no allocation has been made so far.

The President. — This Committee could meet here in the Oceanographic Museum. The Chairman can make arrangements with those of the other Committees so as to avoid disturbing them.

Gentlemen, the Session is adjourned. Chairmen of Committees are requested to come up to the platform for information with regard to the interpreters they may require, and that are available.

The sitting adjourned at 1120.

CHAPTER III.

The third Plenary Session was held on Tuesday, 2nd November 1926, the Vice-President in the Chair.

The sitting opened at 0930.

ANNOUNCEMENTS FROM THE CHAIR.

Absence of President Phaff.

The **Vice-President.** -- The Chair regrets to announce that Admiral Phaff is confined to his room and is unable to attend the Conference. I am sure that all Delegates will join with me in wishing him a speedy recovery.

Minutes.

The proceedings of previous meetings are not ready. This is because Members have not handed in their corrected copies, or have not notified the Secretary of what they wish corrected. Delegates are requested to inform the Secretary as soon as possible whether or not they agree with the copies of the proceedings they have read.

Arrival of Delegate representing the Kingdom of the Serbs, Croats and Slovenes.

The **President.** — The Chair takes pleasure in announcing that the Delegate from the Kingdom of the Serbs, Croats and Slovenes has arrived, I introduce Lieutenant-Commander Chordasich.

Work of the Committee.

The **President.** — Are there any reports of Committees ready to be submitted?

(No response).

It appears therefore that Committee work is going slowly. The Chair suggests that it is possible to make more rapid progress if Delegates avoid making long speeches or arguments. I might add that longer hours are possible. The Committee on Tides has not met, and can not meet while its Members are sitting on other Committees. Prolonged discussions of other Committees might postpone this Committee indefinitely.

The Chair has learned that there is doubt in the minds of Delegates as to effective date of decisions and recommendations of this Conference. Before attempting to pronounce on this very important subject, the Chair requests information as follows: Is there any Delegate present who is authorised by his Government to accept or decline, on behalf of that Government, any decision reached by this Conference?

Captain Luymes (Netherlands). — In reply to that question, Mr. President, I can say that I am authorised by my Government to accept or decline the decisions made here according to my own judgment.

Captain Schweppe (Germany). — The German Delegation is authorised to accept all proposals which are of a purely technical character and which do not entail considerable expenditure.

M. Fichot (France). — I consider that the Statutes essentially provide that the decisions of the Conference cannot be formally binding on national Hydrographic Offices. The French Delegation is fully authorised to accept all changes which appear to be practicable and desirable, but it cannot make a formal engagement that its home Authorities will accept them.

The President. — It appears to the Chair that a very small minority is authorised to accept or decline any decision of this Conference.

I will state, as the Delegate from the United States of America, that under no circumstances have I authority to bind my Government to, for example, the payment of increased money contribution, should the Conference decide that contributions should be increased. Much less have I authority to speak for my Government in matters which might have political significance.

It is therefore the decision of the Chair that this Conference can only put forward *recommendations* to the States.

ELECTION OF THE DIRECTORS.

Please consider for the moment the Statutes governing the election of Directors. The Chair is informed that some have thought that this Conference can change those Statutes so as to affect the coming election. This is obviously inadmissible.

Lists of candidates for Membership in the Directing Committee have been distributed. The Chair finds it necessary to form a small Committee to pronounce upon the eligibility of these candidates. Taking as a guiding principle that it is undesirable that Delegates from States which have put forward candidates should serve on this Committee, and that those who do so serve should represent States Members well distributed geographically, the Chair proposes that the following named Delegates should form this Committee :

<i>China</i>	: Commander SHAO CHUNG.
<i>Denmark</i>	: Captain H. O. RAVN.
<i>Egypt</i>	: MAHMOUD BEY BAYRAM.
<i>Monaco</i>	: M. GALLEPE.
<i>Spain</i>	: Captain HERRERO.

Are there any objections to this Committee as proposed ?

There being no objections the Committee will be thus formed.

Value of Decisions taken by the Committees.

Mr. Richards (Egypt). — Might I ask, Sir, what are the terms of reference of this Committee ? Is the Committee formed to report to a Plenary Session or is it to take decisions which are binding on the Conference ?

The President. — No Committee can make decisions which are binding on the Conference. The Committee will be asked to submit its reports to the Conference upon which the Conference will act.

PROPOSAL PRESENTED BY THE SPANISH GOVERNMENT SUGGESTING TRANSFER OF THE SEAT OF THE BUREAU TO MALAGA.

The President. — The Royal Spanish Government, through its Delegation, has proposed to the Conference that the seat of the Bureau should be moved to Malaga, and has most generously offered to provide entirely satisfactory quarters for this purpose. The text of this proposal has been distributed. When the Delegates have considered it, a vote as to the recommenda-

tion to be made to the Governments of the States Members by the Conference will be taken in Plenary Session.

The **Secretary General** read the text of this proposal:

"In the name of the Spanish Government and of its special Delegation I have the honour to offer in all liberality and generosity to the International Hydrographic Bureau, as its seat and for the establishment of all its important sections, the building destined for the Institute of Oceanography and Marine Biology, which is to be built in the city of Malaga, the provisional plans of which I submit, they being open to amplification and modification as considered necessary for the Bureau.

"This building will be completed at the end of 1927".

(Sgd): ODON DE BUEN.

"In conformity with the provisions of Article 56, paragraph (6) of the Statutes, we propose that the International Hydrographic Bureau will have the kindness to accept the offer of the Spanish Government, for which acceptance we offer our thanks. This will contribute to the strengthening of its life, and to the intensification of its work."

Captain Luymes (Netherlands). — I do not understand the last paragraph of this proposal.

Article 56 (b) says:

"No subject, which is not included in the final schedule, shall be discussed unless it is proposed by at least three of the Delegations of the Members..."

I should like to ask which three Delegations have proposed this?

The **President**. — The Chair replies that no proposal is considered by the Chair unless it has been put forward in due form. All proposals received have been so put forward.

Captain Luymes (Netherlands). — Mr. President, that is not what I asked. I asked for the names of the three Delegations. I believe we have the right also to know that.

The **President**. — While the Chair does not allow that it is essential that these names be given, I can give you the information which you want. Spain proposes, — Argentine and Peru sign in agreement.

INVITATION TO GEODETIC AND GEOPHYSIC UNION.

The **President**. — A proposal has been made, for the consideration of the Conference, that, when organising such Conferences, the Directing Committee should be authorized to invite thereto the Presidents and Secretaries of the Oceanographic Section of the International Geodetic and Geophysic Union and of all other Organisations which deal with the study of the Sea.

This will be referred to the Statutes Committee.

The **Secretary General**. — The proposal reads:

"Addition to Article 50 of the Statutes:

"The Directing Committee is authorized to invite to the Conferences the Presidents and Secretaries of the Oceanographic Section of the International Geodetic and Geophysic Union, and also the Presidents and Secretaries of all other international Organisations which deal with the study of the Sea".

Proposed by Spain and supported by France and Chile.

*ELIGIBILITY OF A GERMAN CANDIDATE TO A SEAT ON THE
DIRECTING COMMITTEE.*

The President. — A proposal has been submitted to the Conference that, Germany having become a Member of the Bureau on 23rd October, a candidate for a Directorship named by this State before the list was officially closed should be accepted as eligible. If there are no objections his name will be submitted to the Committee on Eligibility.

His name and the note relative to his services will be distributed as have been those of the other Candidates.

Is there any objection ?

Captain Luymes (Netherlands). — Mr. President, I am sorry to say that, according to the Statutes, I must object to the proposal of the Bureau. Art. 59 (i) says emphatically that these lists must reach the Bureau at least ten days before the opening date of the Conference. That means that in this case these lists must have reached the Bureau by the 16th October. Germany became a member of the Bureau on 23rd October. I do not see that we can make an exception in this case. I therefore object to this proposal.

The President. — The Chair has stated, and repeats, that the name of this candidate was received before the list was officially closed, that is to say, it was received ten days before the Conference.

Captain Luymes (Netherlands). — I cannot see, Mr. President how a State can put forward a candidate for an Institution of which it is not a Member.

Captain Schweppe (Germany). — The communication from the German Government, announcing that Germany adhered to the Bureau, reached the Bureau in time, namely ten days before the opening of the Conference. But it is obvious that a certain period must elapse while the documents giving official adhesion are being signed by a Government. It is for this reason that the formal adhesion did not become official until 23rd October, though the notification was given in time. There is therefore no infraction of the provisions of the Statutes.

The President. — After reading the Statutes referring to this, the Chair believes that a decision of this Conference in this respect is not a change of Statute. It is a particular situation arising from what might be called "delay in mails". I consider that this Conference is justified in expressing an opinion as to whether or not the Conference can decide on this as not being a change of Statute.

Captain Luymes (Netherlands). — The German Delegate has explained the delay as resulting from formalities, and therefore all has been said that can be said, but I must maintain my objection and my opinion, based on the wording of the Statutes. Certainly the Conference can have an opinion in this matter, and I propose that the Conference should vote on it.

The President. — Is the proposal seconded ?
(No response).

While the Chair made the statement that it was its belief that this was a matter for voting, that particular statement was not made as a proposal by the Delegate of the United States of America. The Chair therefore takes the liberty of seconding, as a Delegate, the proposal of Captain Luymes that this Conference now vote as to whether or not the German candidate's eligibility be considered by the Committee charged therewith.

Before a vote is taken, the direct proposal from Germany will be read by the Secretary General.

The Secretary General. — The German proposal is as follows :

"In accordance with Art. 59 (1) of the Statutes, Germany sent a list of candidates to the Bureau. This list arrived ten days before the opening date of the Conference, but, as on that date the formal announcement of the adhesion of Germany to the Bureau had not arrived, the Bureau was forced by the letter of the Statutes to decline the German proposal.

"I would be obliged if the Delegations of Great Britain and France would be good enough to second my proposal, namely that the German candidate for the Directorship may be put on the list of candidates, although the adhesion of Germany to the Bureau did not arrive until less than ten days before the opening of the Conference.

"In accordance with Art. 56 (b) we request you to enter this proposal on the agenda of the Conference."

The Delegate of France accepts this proposal; the British Delegate supports the proposal.

The President. — The question is: shall the eligibility of the German candidate be submitted to the Committee on Eligibility?

Are you ready for the question?

(A vote was taken).

The President. — There is a large majority in favour of submitting the name of the German candidate to the Committee on Eligibility, and it will be so submitted.

DATE OF TERMINATION OF THE CONFERENCE.

The President. — No other programme will be made beyond stating that, after this session, Committees must meet with a view to expediting the submission of their reports.

If the Secretary General of the Conference be kept informed of the progress of these reports, no time will be lost in calling a plenary session to consider them.

Business having proceeded more rapidly than had been anticipated, the Chair suggests that Committees which can meet here should do so immediately after this session.

In connection with the work of Committees, are there any subjects needing elucidation which might tend to expedite progress in Committees and subsequent discussion in Conference?

(No answer).

Captain Douglas (Great Britain). — I should like to make a few remarks on behalf of the British Delegation.

The British Delegation having made all arrangements with their Government to attend the International Hydrographic Conference at Monaco for a period of 14 days, which was estimated to be its duration (vide p. 147 of the "Proposals") beg to inform the President and Delegates now assembled in Plenary Session that, owing to other most important work in their own country their stay cannot be prolonged much beyond the period mentioned and they are therefore obliged to make their arrangements for leaving the Principality on or before Wednesday afternoon, 10th November. They have no doubt however that after the President's remarks the most important of the decisions and discussions will by then have been satisfactorily completed.

The President. — From informal conversations which I have had with the Delegates I believe the Conference is practically unanimous on this question. If the question were put to the vote I feel sure we should have

unanimity, but I think the decision should rest with the Members of the Committees who are in a position to expedite the work.

Captain Luymes (Netherlands). — The main point is that our work should be done thoroughly, however I fully agree with the British Delegate that it will be difficult to prolong the Conference after the 10th or 12th November. I can only see one way of avoiding such prolongation and I therefore submit for your consideration that we begin our meetings earlier and end them later, also that everybody should prepare as far as possible what he has to say so that he may put it forward in as concise a form as possible. We should do well to bear that in mind.

Captain Björset (Norway). — The Committee on Statutes will meet at 2.30 p. m.

The President. — There being no apparent desire to make further comments, the Chair is glad to believe that Delegates will do all in their power to expedite their Committee work.

PROPOSED BUILDING AT MALAGA.

The President. — The Chair announces that the plans of the proposed building at Malaga will be exhibited on this table for the benefit of Members.

This Conference is adjourned to await the call of the Chair.
The Meeting adjourned at 1040.

CHAPTER IV.

The fourth Plenary Session was held on Thursday, 4th November 1926, the Vice-President in the Chair.

ANNOUNCEMENTS FROM THE CHAIR.

The President. — The Chair has informal announcements to make before beginning the business of the Session.

The attention of Delegates is invited to a small model of a surveying boat which has been placed here by Commodore Reinius, and Delegates are invited to inspect it.

Those Members who have not signified their intention whether or not they will go on the excursion planned for next Sunday are requested now to indicate to Mr. Albert, of the Bureau, by raising their hands, the fact that they desire to go.

COMMUNICATION OF M. DE ROUVILLE ON THE PROGRESS OF THE STUDIES OF THE BUOYAGE COMMITTEE.

The President. — The Chair announces the arrival of two Delegates of the League of Nations, M. de Rouville and Commander Norton, and takes pleasure in introducing them to the Conference.

These Delegates, as members of the League's Buoyage Committee, have been in close touch with the International Hydrographic Bureau for the purpose of studying the various systems of buoyage and lighting as tabulated by the Bureau, with a view to proposing a standard system for general use.

The Chair thinks that this subject has been taken up and is being thoroughly examined by the Buoyage Committee of the League, with which the Bureau has co-operated by furnishing data.

Unfortunately the recommendations of the Buoyage Committee, as embodied in their final report, have not yet been received, but are due to arrive from Geneva; on arrival they will immediately be distributed to the Delegates.

The States which are represented on this Committee are nearly all members of the International Hydrographic Bureau, and it is thought that the Delegates who would be sent to any international Conference which may be held in the future to consider this matter would be those who are charged in their own States with the administration of the buoyage systems.

The Chair believes, therefore, that those who are now dealing with the subject should continue to do so without expression of opinion from this Conference, particularly as no one now in attendance has been given the duty of studying it in Committee or otherwise, except in so far as it concerns technical documents.

Are there any objections or comments to be made upon what has been said?

Commander Brandon (Great Britain). — May I ask, Mr. President, what is the intention; whether are we now to discuss the subject of buoyage?

The President. — In reply, the Chair states that it is not the intention to discuss buoys at this Session, except that M. de Rouville has kindly consented to notify this Conference as to the extent of the studies carried out. *(No further observations were offered).*

The President. — It will then be of interest to the Conference to hear what progress has been made, and M. de Rouville will now kindly give us a short summary of the work done.

M. de Rouville (Member of the Buoyage Committee of the League of Nations). — The International Hydrographic Conference has kindly invited the League of Nations, or to be more exact the Special Committee which the League of Nations has formed to study the standardisation of coast-lighting and buoyage, to be represented here. We cannot do otherwise than thank it.

In agreement with the Bureau, we think that some information on the work done by this Committee might interest you. In the first place, we believe it necessary to recall the reasons for the formation of this Committee.

It is the result of a wish expressed in London, in July 1924, at the first meeting of the sub-Commission on Ports and Maritime Navigation of the Communications and Transit Commission of the League of Nations (3rd Session - 22nd July, par. c).

This Committee was originally composed of a few experts chosen by the Secretariat of the League of Nations.

After a preliminary study, in which a choice of the questions to be examined was made and those questions were roughly outlined, it was recognised that it would be advantageous :

To attach to the Committee more experts by extending the number of countries represented.

To insure the valuable cooperation of the International Hydrographic Bureau, which is itself attached to the League of Nations and in particular to have the use of the extensive data already collated to a great extent by Admiral Niblack.

It seemed, in fact, that the questions under consideration required authoritative opinions, both from lighting technical experts and from seamen, both categories having, probably, equal weight, and amongst the seamen those, in particular who have spent the whole or a part of their naval career in hydrographic research or work, would have to be consulted.

From this collaboration there resulted, after the Paris meeting (December 1924), those of Monaco (November 1925) and of Stockholm (August 1926).

The locality of this last meeting was especially chosen in order :

to examine on the spot the frequently special requirements attaching to Scandinavian and Northern Seas, to the form of their coasts and to their usual atmospheric conditions ;

to try to find a common ground of agreement between the lateral and cardinal systems, which it was of great interest to reconcile and, if possible, combine ;

to facilitate the standardisation of the cardinal systems in use, which is far from being obtained.

This work of bringing these into greater harmony was made easier by the excellent personal relations which existed amongst the Members of the Committee ; they were, on this account, able to readjust their points of view between sessions.

Under these circumstances, the Committee which included :

Technical Representatives of 11 countries (Germany, Chile, Denmark, Finland, France, Greece, Italy, Japan, Netherlands, Portugal and Sweden).

A Representative of the International Hydrographic Bureau.

A Representative of the International Federation of Transport Workers and of the International Association of Officers of the Merchant Marine and of Seafarers

and a Representative of the International Labour Office.

was able to draw up a general report with supplementary conclusions.

The documents are doubly of a provisional character, for they have neither yet been submitted for approval to the sub-Commission on Ports of the Communications and Transit Commission, nor, above all, to the Representatives of the States themselves at a conference of governments which the Secretariat of the League of Nations proposes to convene.

The experts who tendered advice were not able to bind their Governments or the Departments which they represented, though the unanimity which they showed in presenting the conclusions reached indicates a very considerable moral probability of the future success of the work being done.

The questions taken up by the Committee, partly at the request of the International Hydrographic Bureau, dealt with :

Characters of Lights,

Ordinary Buoyage and Special Buoys, one of the most important questions.

A certain number of Coastal and Port Signals, of which was noted the extreme diversity in the combinations not only in different countries, but even within each one of them ; in this the Committee limited itself to drawing up rules for Storm Warning Signals, which has been taken up by the Meteorological Committee also at Zurich (of which account will be taken), Ice Signals, Tide and Water level Signals, Current Signals, Pilot Signals, Mine and Hydrographic Sweeping Signals, Signals relative to movement of Vessels in general, Dredger, Bridge, Lock, *etc.*, Signals ; frequently more complete and better meanings have been referred to the International Code.

Then three less general questions were dealt with, namely :

Agreement between the characters of lights and fog signals when these are associated at the same station ;

The placing of top-marks on lighted buoys.

Rules or considerations common to Radio Fog Signals.

In the recommendations made, the Committee was inspired by the following principles :

That the Maritime Nations should not be put to great expense in making changes, particularly in the present financial condition of some of them, but rather to indicate the desiderata which should be taken into consideration when making changes or creating new things, avoiding everything which might entail costly upsetting of existing apparatus ;

To take fully into account the existing states of affairs and to uphold them in so far as they are not in direct opposition to the general characteristics which it appeared necessary to bring forward and support ;

To leave to those who have variations the duty of reconciling local rights with the general principles ;

To encourage direct experiments on points where opinions are not yet unanimous.

In accordance with these principles, it has been possible to draw up draft rules which allow the lateral and cardinal systems to remain essentially in existence along parallel lines by making their definitions and their proper spheres more precise and even by partly combining them ; certain systems of buoyage will certainly gain thereby if they are allowed in increase the information given by them.

For lights, the Committee tried to bring out and recommend the simplest and most distinctive characters and to allot to each category of lights those characters which are most suitable to it without detriment to the others.

All these principles and these proposed applications thereof will have the

subsidiary effect of preparing general opinion to recognise the superiority of a coordinated system over existing systems which are somewhat chaotic, not so much on account of differences in character but because of the manner in which definitions are given and of the allocation of characters to the corresponding items.

This last remark is made in order that it may be realised that the effective changes to be made will not be as great in each country as a too hasty reading of the conclusions reached might cause to be thought.

These conclusions will lead more to repainting or to change in top-marks, that is to almost negligible expenditure if this work is combined with current maintenance, and not to changes of a more serious order.

Past experience has shown that such readjustments may be carried out without real danger to shipping which is duly warned and frequently steered by the Pilotage Service.

The most notable outcome of the work of the enquiries of the Committee is the enormous desire amongst seamen of the countries consulted — all maritime States worthy of this name replied to this effect — to have a standardisation on some basis or another. In expressing the desire to obtain this standardisation they have added information on the direction in which they believe this to be attainable. This information has not always been in agreement, had it been so it would have been a too remarkable coincidence, though this was the case sometimes; but the important point is the desire to obtain uniformity.

As to the method of obtaining it, many seamen do not always attach great importance to this or that system, or even to their national system, perhaps even less than the technical experts to whom a change is always an annoying business. The essential point for those who benefit by standardisation is that it should be adopted by the greatest possible number of countries. It would already present great advantages if a single system were in use over long stretches of coast, even though not on all, which last it is perhaps too presumptuous to hope for in the near future.

The good will of the Delegates to the Committee of the League of Nations has obviously been very great when they understood the amicable spirit in which work was carried on, and this greatly facilitated bringing it to a successful conclusion.

Commander Norton and I are at the disposal of the Conference or of those Members thereof who may require information, particularly to give them any further explanations which any of them may require, for it scarcely appears practicable here to go into the very details of the proposals.

The President. — Unless there are Members who wish to have this paper read in English, that will not be done.

(There was no request for the statement to be interpreted).

The President. — It will therefore be translated and distributed, later. The Chair, in the name of the Conference, thanks M. de Rouville for his kindness.

CHARGES FOR SUPPLYING RADIO-COMPASS BEARINGS.

The President. — It is proposed by the Delegations of Germany, Norway and the United States of America that this Conference instruct the International Hydrographic Bureau to request those States Members, which now make a charge to mariners for supplying radio-compass bearings, to abolish those charges. Are there any objections or comments?

Captain Douglas (Great Britain). — Mr. President, as Delegate for Great Britain, I must inform the Conference that I cannot consider this request in any way whatever. It is entirely outside my province.

Captain Luymes (Netherlands). — I agree entirely with the Hon. Delegate for Great Britain.

The President. — Is there anyone present who has not fully understood the proposal?

Captain Schweppe (Germany). — I should like to inform the Hon. Delegate of the Netherlands that his country has recently installed some radio stations on the coast, and that the Government of the Netherlands does not ask any payment for these.

Captain Luymes (Netherlands). — I would like to answer to Hon. Delegate for Germany that what he has read in the Notice to Mariners simply relates to a term of trial. Afterwards it will certainly be paid for, but I may say that the whole thing does not concern me at all. It is the affair of the Ministry of Public Works of my Government.

The President. — May the Chair ask if you have objections to the International Hydrographic Bureau communicating with another Government than yours requesting that charges be abolished?

Captain Luymes (Netherlands). — I have, Mr. President, for I consider this business outside the sphere of work of the International Hydrographic Bureau because it is not covered by the Statutes.

The President. — In response to the request from the Delegate from Germany, and without reading all that is written, the proposal is for this Conference to ask the Bureau to request States Members not to make charges to mariners for radio-compass bearings. Radio-compass bearings are very valuable to Navigators, and, regardless of any or all nations, do concern safety on the sea and safe navigation. There have been two objections to this proposal. Are there any others?

Lieutenant-Commander Chordasitch (Kingdom of the Serbs, Croats and Slovenes). — I support Captain Douglas.

Captain Luymes (Netherlands). — May I propose to postpone this discussion till the Report of the Committee on "Work Done by the Bureau" has reached the Conference? I do not mean on the question of bearings, but on the right of the International Hydrographic Bureau to deal with navigational matters.

The President. — The question is, shall or shall not, this Conference request the Bureau to invite States Members now charging for radio-compass bearings to withdraw those charges. Are you ready for the question?

Captain Douglas (Great Britain). — I should like Mr. President, as Chairman of the Committee on "Work Done by the Bureau", to support the suggestion of the Delegate of the Netherlands. We have a great number of questions in that Committee to consider in full Session, and this question is very much mixed up with them. If, however, it is decided that there should be a vote taken, I should suggest that it should be taken in the ordinary secret ballot, and not by a show of hands.

The President. — The Chair has little to say on this subject, except that it does not seem that a body of this sort should devote the time to it, that appears to be desired. It will take five minutes to decide whether or not this Conference wishes something. I see no reason for taking longer. Certainly Members know now whether or not they want the International Hydrographic Bureau to make this request. Therefore, I can see no use in having a secret ballot and will not so order unless the majority wishes it.

Captain Luymes (Netherlands). — I beg to state that according to my opinion, it is a question of principle, and for that reason I say that the Bureau has no right, according to its Statutes, to meddle with navigational affairs. Unification of these subjects is not the object of the International

Hydrographic Bureau and does not lie within its province as described in Art. 6, para. (iv) of the Statutes, "to endeavour to obtain uniformity, as far as possible, in *hydrographic* documents"; nor does para. (ii) "to coordinate the *hydrographic* work of these Services (the Hydrographic Services of its Members) with a view to rendering navigation easier and safer in all the seas of the world", give reason to justify this question being dealt with by the Bureau. Para (ii) speaks specifically of *hydrographic* work.

The question is therefore subjected to the strict meaning of the word "*hydrography*".

Now, we find on pages 60 and 61 of Vol. I, No. 1 of the "*Review*", March, 1923, several definitions of that word. They nearly all speak of surveying, description and charting of the sea, waters and coasts, describing, either by drawing or writing, the circumstances and conditions *as they are*, but none of those definitions indicate that hydrography means also the changing of those conditions. I mean that it is *hydrography* to describe a buoy as black or of any other colour, but it is not an affair of hydrography to take care that the colour of a buoy shall be changed.

The wider scope given by the Bureau last year to its objects is therefore not justified by the Statutes, and a criticism of the different harbours and proposals to improve them might just as reasonably be made with a view to rendering navigation easier and safer. In short, the Bureau is a hydrographic one and not a navigational or a shipping Bureau.

The President. — It has been moved and seconded that this question be postponed. Are you ready to vote on the question? Those in favour of postponement please raise their hands.

Eighteen in favour. The question is postponed.

PROPOSED TRANSFER OF THE BUREAU TO MALAGA.

The President. — The Delegates having now had time to consider the kind invitation of the Spanish Government to transfer the seat of the Bureau to Malaga, and the preliminary plan of the building having been open for inspection by Delegates, the Chair considers that a vote can now be taken on the subject. As this is an important question which involves a change in the Statutes, namely Article 20, a secret ballot will be taken and the Chair reminds Delegates that under the provisions of Article 64 of the Statutes changes in the Statutes can be made only if a two-thirds majority agrees to it. The Chair reminds Delegates that only Delegates of States Members may vote and cast one vote per Delegation.

Captain Douglas (Great Britain). — Mr. President, I think we have all been very much struck with the very generous offer of the Spanish Delegation on behalf of its Government, and I think we are rather rushing it by voting right away before knowing anything about the conditions. I suggest that it would be more satisfactory if, for instance, the Conference appointed two or three Members present to look more closely into the matter, in fact they might almost go to Malaga and see what the conditions are, and they might possibly be accompanied by one of the Members of the International Hydrographic Bureau. After all, it is not as if the building were ready for occupation and the whole staff had to go there right away. There is plenty of time, and I really think it could be done in that way and referred to the various States Members when they get back to their countries. I think it is rather treating the subject too hurriedly. I am sure you will all agree that the offer is most generous, a free building, and from what I can understand in my Committee, the cost of the building in Monaco is not going to be less in the future. I think it is only fair — what I might call cricket — to look more closely into this matter before voting.

The President. — The Chair understand that this Conference is requested to express an opinion. This Conference will cease to exist soon, it cannot send Members to Malaga, but it can here express its opinion and decide whether or not the Conference, as a body, recommends the transfer to Malaga. It can, under no circumstances go further. The Governments of the States Members only can go further. I believe it would be rude to fail to express an opinion on this matter. Are there any comments?

Captain Schweppe (Germany). — If this Conference were to decide against the transfer, the question would be solved. But this decision is of such importance that the subject should be studied more deeply before passing to the vote. Therefore I fully share the opinion expressed by Captain Douglas.

Commodore Reinius (Sweden). — Mr. President, I cannot recommend or refuse this proposal before it has been examined further. I fully agree with Captain Douglas.

Captain Luymes (Netherlands). — I am not in agreement with Captain Douglas. Certainly, it is a most *important* question, but it is also in my opinion a *simple* question. It is only with some reluctance that I have to make a criticism of the most generous offer made by Spain, but there are two serious objections to transferring the Bureau to Malaga.

In the first place, when we created the International Hydrographic Bureau it was clearly understood that it was necessary that the Bureau should be independent and should not come under the influence of any nation, and this would no longer be the case once we accepted a free building, which would bring us somewhat under the influence of the country concerned.

In the second place, if we go to Malaga, it is a matter of course that, after some years, Spanish will be accepted also as a language of the Conference and of the Bureau, and although there is much to say in favour of Spanish, which is much spoken in many parts of the world, the practical thing against it is that we shall then have three official languages, and we already find that two present difficulties. If then you take on another you open the door for German and Italian, and in a more or less far future similar claims will be made for Russian, Chinese and Japanese; I think that all these languages will, in the end, be the death of the Bureau, even as in the biblical example, the Tower of Babel. (*Laughter*).

The President. — Members are reminded that the question is one of whether or not this Conference expresses an opinion.

Professor de Buen (Spain). — The offer of the Spanish Government is neither directly nor indirectly connected with the question of the Spanish language.

Captain Caballero y Lastres (Peru). — We should thank the Spanish Government for the spontaneous and most generous offer which it has just made to the International Hydrographic Bureau, through its Delegation.

Spain, which was the cradle of overseas navigation and of hydrographic work, faithful to her traditions of nobility and generosity, thus ensures, for all time, the life of the International Hydrographic Bureau and, in this way, contributes towards the prestige of that Institution. The Bureau could thus develop freely and fulfil the tasks with which it is charged; it could receive the Delegates of the States Members who may come to exchange ideas and ascertain the general outlines from the Directing Committee for the work to be undertaken by the national Hydrographic Offices.

The economy effected by the suppression of rent charges will avoid the necessity of reducing the salaries of the Directors and those of the staff whose competence we have been able to appreciate. It would not cause them to suffer disadvantages, for the costs of transport will be paid, so my illustrious Colleague, Professor Odon de Buen, has informed us. In fact, the Spanish

Government considers that the Committee should retain all the present personnel which is familiar with the work of the Bureau.

All will rapidly become accustomed to the softness of the climate of Malaga, which is as agreeable as that of Monaco, and to the kindness of Spanish hospitality which is no less warm than the amiable and pleasant hospitality of Monaco. But account must also be taken of the advantages from the economic point of view, which would follow on the acceptance of the offer of the Spanish Government.

The funds of the Bureau would permit the installation, at the Bureau itself, of a printing press which would produce the various publications of the Institute.

The International Hydrographic Bureau would thus receive a new impulse, for the great prestige which Spain enjoys in America would certainly contribute to cause some fifteen Nations which are not represented in the Bureau, to adhere thereto as Members.

However, it should not be forgotten that the Bureau took its first steps in the beautiful Principality of Monaco. All thanks are due to the gracious Sovereign and to the Authorities for their support. Without doubt the Bureau would not have thought of leaving the Principality but for the kind offer of the Spanish Government, which should be accepted with thanks and without hesitation, with the object of consolidating the position of the Bureau.

Captain Gerken (Chile). — I think that the generous offer from the Spanish Government involves a change in the Statutes. The Conference has set up a Committee to study changes in the Statutes and to report on the matter to the Conference, therefore I think that this new proposal should be sent to the Committee on Statutes, in order that its advantages and drawbacks may be studied, and the Committee should then report fully to this Conference.

The President. — The Chair regrets it cannot agree that this is a change in the Statutes. If the Governments of the States Members accept this proposal the Statutes will be changed, but a recommendation by this Conference in reply to this proposal will not involve a change of Statutes. Are you ready for the vote?

Captain Luymes (Netherlands). — Mr. President, I have taken note of the Spanish declaration that the offer of a free building will not imply any obligations, but there are natural influences. I bet you ten to one that five years after the Bureau has been transferred to Malaga, Spanish will be the third official language of the Bureau.

Commodore Reinius (Sweden). — I agree.

M. Fichot (France). — It seems difficult to maintain that this proposal does not affect the Statutes. Besides, the President stated, a moment ago, that the vote, to be valid, should be supported by a two-thirds majority, for the precise reason that this proviso is made as to all changes in the Statutes.

The President. — The Chair replies that a Recommendation will not change a Statute. The carrying into effect of that Recommendation will require a change of Statute. Delegations are requested to write on one sheet of the paper of the pads on their desks one of the two words: "Monaco", "Malaga", then to fold the paper and put it in the box.

Captain Douglas (Great Britain). — Mr. President, I should like to remark that my proposal was seconded.

The President. — The one that it be postponed?

Captain Douglas (Great Britain). — Yes.

The President. — I am sorry; I did not get that. The Chair apologises and regrets that it did not note that seconding. Did you make a Motion that this matter be postponed?

Captain Douglas (Great Britain). — I suggested that, Mr. President, and it was seconded by the Hon. Delegate of Germany.

The Chairman (to the German Delegate). — Do you second that as a Motion?

Captain Schweppe (Germany). — Yes.

The President. — Are you ready for the question which the Chair failed to note, namely that this was put as a Motion? Are you ready to vote as to whether or not this matter will be considered now by this Conference? As this is considered by the Chair to be a matter of some delicacy, a secret vote will be taken as to whether or not this question will be settled now.

Delegations are requested to write on a piece of paper "yes" or "no"; "yes" signifying that this matter will be postponed, "no" signifying that it will be settled now. Delegations of States Members will vote. Will Captain Fablet, Captain H. O. Ravn, and Captain Kawamura please count the votes.

The vote having been taken, the Chair announced that *the question was postponed* in accordance with the majority vote.

CHANGE IN NUMBERS OF SHARES AND VOTES OWING TO GERMANY JOINING THE BUREAU.

The President. — The question has fortunately arisen in the Committee on Statutes concerning the votes for Directing Committee controlled by the new Member, Germany. That State has given its tonnage for this year and it is well known that this tonnage has not been constant during the past five years, and it is upon a tonnage of five years ago that other States are controlling votes.

Assuming that the Conference wishes the new Member to vote, and this has been already determined by vote, it remains to have equitable values adjusted and to assign them to all States Members.

The Chair finds that it has been and is the duty of the Directing Committee of the Bureau to correct, from time to time, the table contained in Article 34 (b) of the Statutes, in accordance with the scale laid down in Article 34 (a). See Article 61.

The Chair therefore will entertain a motion by a Delegate that the Directing Committee be asked to adjust the table, immediately, and in accordance with Article 61 (b) report it to Members.

Admiral Niblack (Director of the I. H. B.). — The Bureau has now received from the German Government its financial contribution as a Member and a statement of its tonnage as follows:

Men-of-war	172,794
Merchant ships	3,053,868
	<hr/> 3,225,662

The payment has been made on a basis of 8 shares and 8 votes. It is therefore requested that the Delegates enter these data in the Table of Shares, Votes and Contributions in the Statutes, that is described in Article 34 (b).

The President. — The Chair suggests that a motion is in order to adjust the table as suggested.

Captain Luymes (Netherlands). — In reply to your speech, Mr. President, I propose to rectify this list according to the indications given.

The President. — Is there a seconder?

It is the understanding of the Chair that it is the duty of the Bureau to keep this list correct, and not the duty or function of the Conference. But

the table obviously should be corrected and the Conference equally obviously should take action.

Commander Brandon (Great Britain). — Mr. President, as a member of the Statutes Committee, I should like, if possible, to be a little clearer about this matter before we proceed to vote. We on the Statutes Committee have encountered the difficulty that at the last Plenary Session the Chair ruled that the present Conference could not change the Statutes so as to affect the coming election. The view has been represented and found general support in the Statutes Committee that the Tables of Tonnage, Shares, Votes and Contributions contained in Articles 34 (b) and 35 (a) form an integral part of the Statutes and, therefore, as long as the Chair's ruling, which I mentioned, remains in force they cannot be altered. I should very much like, Mr. President, to have light on that subject.

The President. — In reply the Chair invites attention to Article 61, which reads:

"The Directing Committee shall make the necessary decisions with reference to questions which arise during the period between Conferences, except as to those specially provided for in the Statutes..."

(d) "In cases where circumstances do not allow the procedure laid down in the Statutes to be followed the Directing Committee shall make decisions, but, if this is done, it shall make immediate report to the Members."

Under no conditions could the Directing Committee have corrected this Table prior to 23 October. I think all Members are conversant with what the Directing Committee has been doing since that date.

Admiral Niblack (Director of I. H. B.). — This is the first time there has been Plenary Session since we have received the contribution of Germany. This function is a routine one on the part of the Directing Committee, as when Belgium withdrew and when Poland entered. These things are entered in the Tables as a part of the routine; it does not seem to be a question of Statutes so much as a question of facts.

M. Fichot (France). — Does not the correction of the Table for an adhering State entail the complete correction of the Table for all States Members?

The President. — The Chair has stated that in its opinion the Table should be modified and that under the Statutes the Directing Committee should do it, and has expressed its willingness to receive a motion to that effect or to some other effect.

Mr. Richards (Egypt). — It seems to me that Article 37 applies if you would read that out.

The President. — That is confirmation of what the Chair has already stated, and it is why the Chair will be glad to receive a motion to ask the Directing Committee to perform that function.

The Delegate from the Netherlands has made a motion.

Captain Fablet (Argentine). — The question now raised has already been referred to a sub-Committee by the Committee on Statutes and, thus, it would be better to await the report of this sub-Committee before making a decision in Plenary Session. It is probable that this report will be made to-morrow.

Captain Bjørset (Norway). — I submit, Mr. President, that I feel a little surprised at this discussion now, because as Captain Fablet says, this question has been put to the sub-Committee and I am waiting for the result of that work. I will get it as soon as possible, I think this afternoon, or at all events to-morrow and then we will do all that we can to report to the President as soon as possible.

Admiral Niblack (Director of the I. H. B.). — I should like to say that it would take the Directing Committee about ten minutes to regulate this matter once it is in their hands — there is no hurry — it is merely a matter of procedure according to the Statutes.

Commander Brandon (Great Britain). — Mr. President, I beg to second the motion of the Hon. Delegate from the Argentine.

The President. — The Chair suggests that if everything is postponed it will be later than the 10th when this Conference adjourns.

Article 37 which is not new to the Chair states positively how this thing could be done.

Mr. Richards (Egypt). — Is it not proposed by the Hon. Delegate from the Netherlands that the Directing Committee should revise the Statutes?

The President. — Yes.

Mr. Richards (Egypt). — I second that.

The President. — It has been moved and seconded that the Directing Committee be asked in accordance with the Statutes to furnish the Conference with a corrected Table in the Article of which we have been talking.

Are you ready for that question?

Mr. Fichot (France). — I move that this addition be made in accordance with the provisions of Article 37 of the Statutes.

The President. — As that is obviously the intention there can be no objection. Are you ready for the question? (*A vote is taken*).

The majority of those voting did not wish a new Table prepared.

The Chair would be glad to entertain some motion which will enable business to proceed in connection with the election of Directors. As the matter stands now there is an incorrect Table and votes cannot be allocated.

Commander Brandon (Great Britain). — May I say that I understood that the Hon. Delegate from the Argentine proposed that this question should be postponed until the Statutes Committee had had an opportunity of studying the report of the sub-Committee specially appointed regarding this matter, and had reported to the Conference, and I begged to support that motion.

The President. — It has been moved and seconded that the subject of a new Table concerning contributions, tonnages and votes be postponed until a certain Committee can report. Are you ready for the question?

A vote was taken.

The majority voted that this matter be postponed.

The President. — The Chair has been informed by the Directing Committee of the Bureau that States Members which are unable to be represented by Delegates at this Conference have sent sealed votes with the request that they be opened at the Conference at the proper time.

A motion that this procedure be adopted by this Conference will be entertained. It must be understood that such votes can be opened and registered only by the Committee appointed to count the votes. The States thus far concerned are Poland and Siam.

In the absence of a motion as suggested the Chair takes the liberty of suggesting that this procedure be adopted. Are there any objections?

Captain Ravn (Denmark). — But how are you to tell how many votes they have?

The President. — The arithmetical answer to that question is that no matter what is in the Table these two States have identical votes in all Tables, *i. e.* the minimum number 2.

In the absence of suggestions the Chair rules that this procedure should be followed.

ORGANISATION OF FUTURE CONFERENCES.

Captain Luymes (Netherlands). — Mr. President, at the second meeting of the Statutes Committee on 28th October, I already raised objections against a too great simultaneity of Committee meetings, it being under such circumstances impossible to handle work properly. The result was a letter from the Chairman of the Statutes Committee to the President of the Conference advising that the meetings of the Committees be arranged in such a way as to allow the Members who are taking part in more than one Committee to be able to take part in all of them. Some improvement has been effected in consequence of that letter. However, this morning there were meetings of no less than four Committees (Finance, Charts, Tides and a sub-Committee for the Statutes). I am strongly of opinion that in this way the subjects cannot be treated thoroughly. I should prefer by far to postpone some of the subjects to a future Conference and not to handle the rest in a hurry. I consider the thorough discussion of Hydrographic matters at the International Conferences of the highest importance and I am of opinion that such is not possible by the actual mode of procedure followed by the meetings of the Committees.

I propose to submit a motion that :

“ Future Conferences be organised in such a way as regards Committees, estimation of time, number of members of each Delegation and timely sending of proposals by the Bureau, that thorough treatment of all subjects be possible ”.

The President. — In my capacity as Delegate from the United States I suggest that as long as any one Delegate insists on sitting on four Committees, the Committee work cannot go on as fast as it should.

Is there a second to this motion ?

Captain Schweppe (Germany). — I am in favour of this proposal as to future Conferences. If I understand the proposition aright, it means that the preparation of future Conferences must be such that it will be possible to do the work thoroughly and I quite agree with that.

Captain Luymes (Netherlands). — Mr. President, in reply to your remark I beg to state that there are two Dutch Delegates and that both never sat on the same Committee. As to Captain Schweppe's remarks, I beg to observe that things cannot be arranged differently now as we are nearly at the end of this Session. Therefore, I suggest that future Conferences should be arranged in such a way as I propose.

Commodore Reinius (Sweden). — I should like to second the proposal of Captain Luymes.

The President. — It has been moved and seconded that in future Conferences, Committees shall be so organised that work can proceed more thoroughly. Are you ready for the question ?

(A vote was taken which carried the motion).

The President. — *Such a Resolution will be entered.* — The programme for to-morrow has been posted. In addition to it the Eligibility Committee wishes to meet at 11 a.m. to-morrow at the Bureau for a Session which should last less than half an hour.

In the absence of a motion to adjourn, the Chair declares this Session adjourned.

(The session adjourned at 1705.)

CHAPTER V.

The fifth Plenary Session was held on Saturday, 6th November 1926, the Vice-President in the Chair.

ANNOUNCEMENTS FROM THE CHAIR.

The President. — The session is open.

The Chair takes pleasure in announcing that an additional representative from Germany has arrived, and introduces Dr. Rauschelbach.

The attention of the Delegates is invited to the information which has been circulated relative to the withdrawal of the name of Admiral Phaff as a candidate for Directorship in the Bureau.

The letter from the Delegate of the Netherlands announcing this fact has been acknowledged by the Chair with appropriate regret. I am sure that the Conference will join the Chair, in sympathy and, further, regret that the Conference has been deprived of the valuable assistance of Admiral Phaff in recent sessions and Committee Meetings.

REMOVAL OF THE BUREAU TO MALAGA.

Is the Conference ready to vote upon the proposal of Spain to move the Bureau to Malaga?

Is there any motion?

Captain Douglas (Great Britain). — Mr. President, with reference to the question of the removal of the Bureau to Malaga, I think, as I mentioned before, that the place ought to be seen; I therefore propose that a resolution be passed to the effect that each Delegate, on return to his own country, should discuss the matter with his own Authorities (that is, the Government Department concerned) and should then report to the Bureau for the information of the other States Members.

Professor O. de Buen (Spain). — I wish to make the following declaration:

"The Spanish Government informed all the Governments of the States Members of the Bureau of its proposal. Some replied in the affirmative; the others replied that they had given their Delegates a free hand in the matter".

Captain Schweppe (Germany). — Considering the words of the Spanish Delegate, it appears to me that the second part of the proposal made by the British Delegate falls to the ground. I therefore support that part of the British proposal which provides that study be made, in Malaga, by a specially appointed Committee.

Commodore Reinius (Sweden). — I agree with Captain Schweppe.

Captain Douglas (Great Britain). — I therefore suggest, Mr. President, that a small Committee might be appointed to consider which Delegates of the States Members should visit Malaga in this connection.

The President. — The Chair regrets that it has no authority to appoint such a Committee.

It has been moved and seconded that an examination of Malaga in this connection should be made, and as the Chair understands it, this includes a reference, by Delegates, to their countries, because I know that in some cases Delegates may only travel, except at their own expense, when ordered by their Governments and the decision must necessarily rest with those Governments.

The Chair then understands the motion to be that this Conference, through the Delegates, refers the question of the removal of the seat of the International Hydrographic Bureau to Malaga and of an enquiry on the spot, to the respective Governments for decision. Am I correct in that, Captain Douglas?

Captain Douglas (Great Britain). — That is so, Mr. President.

The President. — Are you ready for the vote? (A vote was taken).

(The motion was adopted).

The President. — The question of Malaga is reopened for a motion to this effect:

The Delegate from Germany moves and the Delegate from Great Britain seconds the following motion. Is that correct Captain Douglas?

Captain Douglas (Great Britain). — I take it that it is practically what I proposed originally.

The President. — "That the Conference appoint a small Committee of Delegates and also a representative of the International Hydrographic Bureau to proceed to Malaga immediately after the close of the Conference, it being understood that the Members appointed obtain authority from their respective Governments to undertake the journey and that the travelling expenses be borne by the International Hydrographic Bureau".

Are you ready for the question?

M. Fichot (France). — What will be the result of this enquiry? Will the Committee make a report which will then be submitted to the Governments for approval?

Captain Schweppe (Germany). — That is exactly the object of my proposal.

The President. — It is then moved and seconded that this Conference appoint a Committee consisting of a small number of Delegates and a Member of the International Hydrographic Bureau Directing Committee or the Secretary General to proceed to Malaga and inspect the proposed site to which the Bureau might be moved.

M. Butavand (Monaco). — I would like to know whether the Statutes provide that the cost of such Committee should be met by the Bureau itself instead of being paid by the Nations.

It is quite comprehensible that the expenses, in so far as the Director or Secretary General are concerned, should fall on the Hydrographic Bureau, but, for those Members who must obtain authority from their Governments to make this journey, it seems more natural that the costs should be met by the said Governments, as is the custom.

Captain Luymes (Netherlands). — Mr. President, I cannot see the benefit of the proposal of the German Delegate. I have no doubt that the buildings, which are not yet erected, will be very satisfactory, but the objections which I brought to your attention the day before yesterday will not have been removed and I think that is the principal side of the question.

Mr. Richards (Egypt). — Mr. President, before taking the vote on this subject, I think it needs considerable consideration. What is this Committee going to do? Is it to go there, look at Malaga, say it looks a nice place? Is it to go and say there is a hotel, a railway station and a post office there? Professor de Buen can tell us all that. The Honourable Delegate from Spain

can answer any questions we require to put without going to look at the site. I see no use whatever in sending a delegation there. If the people who propose this would throw some light on the matter it would help me considerably

Captain Schweppe (Germany). — It is absolutely necessary that an impartial Committee be able to form a clear and exact idea of the building which the Spanish Government wishes to place at the disposal of the Bureau.

The President. — The Chair would like to make a number of remarks on this subject. There are in Europe not far from Malaga, naval representatives, Naval Attachés of many countries. The States Members must have information about Malaga before deciding whether or not the Bureau shall move there. Those States Members control their Naval Attachés, and other Government representatives, who can easily go to Malaga in almost any number, if necessary one from every country. All information can be obtained, such a Committee can be joined by a representative of the International Hydrographic Bureau, and it appears to me that that is a better solution than, for instance, that the Chair attempt, because it may only attempt, to send Members of this Conference to Malaga. Only those representatives who assure the Chair that they are willing, and can go, can be named. It would be futile for the Chair to name those who say they cannot go or have doubts about their ability; therefore I take the liberty of asking you to consider whether this matter can be handled in another way before taking a vote on the question.

Captain Douglas (Great Britain). — I agree with the remarks of the President in this matter because, so far as the British Delegates are concerned, and the British Government, I am pretty certain that if it were decided by this Committee that a representative of Great Britain should go, and it was referred to the British Government, they would refer it to the Naval Attaché there, and possibly give the British Delegate instructions to get into touch with the Naval Attaché.

M. Butavand (Monaco). — Could it not be laid down for those States which have no Naval Attaché, that, for instance, the Consular or Diplomatic Representative in Spain could go, or, failing such person, a Delegate of the State in question?

Besides, the proposal made by Spain — which upholds the generous traditions of that country and which we should receive with admiration — brings up a somewhat delicate question. The present discussion is a proof thereof. In the first place, the removal in itself is quite a big matter, not only for the States but for the Bureau, for the Directors, for the Members of the staff and for the employees of the Bureau.

In this connection, I would like to be informed on the following points:

Is not the cost of living at Malaga much higher than it is in a country where, as is the case in Monaco, the currency is somewhat slightly depreciated?

Would the Members of the Bureau, the Directors and the employees, whose interests are of value to us, have advantages at Malaga comparable to those which they enjoy here — exemption from taxes both on property and income?

The President. — The Chair replies to the question about representation at Malaga by repeating "the Naval Attachés and other Government representatives". There are commercial representatives, there are people nearby in capitals who may be sent. Being a naval representative myself, the Naval Attachés idea came to me first.

Professor de Buen (Spain). — I feel, very deeply, the kind words spoken by the Delegate of Monaco with reference to my country and I thank him for them. On my part, I wish to say how highly we appreciate the hospitality extended by the Principality of Monaco.

The terms of the offer made by the Spanish Government are quite precise: they state that, not only will the building be provided gratis but also the

installations. The Spanish Government and the authorities at Malaga will certainly give every possible facility for the study of all problems which the Bureau should take up.

Besides, the plans exhibited are not those of the new building; they are the provisional plans for the Oceanographic Institute, and it is to be understood that this building would be suitably enlarged and arranged for the Bureau.

Captain Schweppe (Germany). — Should the new proposal be accepted, what is the procedure to be?

Is it the intention of this Conference to form a Committee of Naval Attachés of the different States, or would the initiative be left to the Governments themselves?

Also, is my proposal rejected on account of the fact that the British Delegation does not support it?

The President. — The suggestion made by the Chair was that the possibility of sending Government representatives now in Europe to Malaga should be considered by Members before they voted on the proposal made by Captain Schweppe, which has not fallen. It is still in order, and will be voted upon.

The question then is upon the appointment of a Committee of the Conference to be sent to Malaga at the expense of the International Hydrographic Bureau, and to make representation in accordance with what they find.

Those in favour of this motion, will please indicate by raising their hands, but before doing so the Secretary General wishes to make a brief statement.

The Secretary General. — While fully appreciating the kind hospitality which has been given to the Bureau by the Principality of Monaco, I would like to call the attention of the Conference, as one of those who was present at the meetings of the Committee which organised the Bureau, that to a certain extent that Committee was misled as to the conditions in Monaco. It having been discovered in 1920, when the League of Nations Secretariat was still in London, that various international Organisations existing in countries other than England — there were two in England at the time — were allowed to import anything necessary for their work free of all taxes on a simple certificate given by the Secretary General of those organisations, (or in the case where they had no Secretary General, the Chairman of the Organisation), and having in 1921 learnt that this was almost the universal practice in connection with the international organisations, a request was addressed by the President of that Committee, the late Sir John Parry, to His Serene Highness, Prince Albert of Monaco, as to whether such advantages would be granted to the Bureau. His Serene Highness, through his Government, replied that there were no taxes in the Principality of Monaco. It was understood therefore that the Bureau would pay no taxes and, as the Delegate of Monaco has just stated, there are no taxes in Monaco. Theoretically we must agree with him. The Principality of Monaco is, by the Convention of 1921, I believe, (though it may possibly have been revised since then) under the Customs regime of France, and all applications for exemption from payment of duties and such like, have to be referred by the Bureau to the Direction de la Douane in Paris. The result is that though the French Government has given the Bureau exemptions from taxes on everything which is required for the technical work of the Bureau, such as documents, instruments, and so on, it has not given the Bureau the right to import certain things which it has been unable to obtain in France.

I mention as an example a rather important item. The Library of the Bureau grows little by little. The Bureau naturally required, if possible, to obtain book-cases which would be capable of being expanded, so to speak with the Library as it grew. Knowing that there are such things as "sectional

book-cases", I sought throughout France for a firm which could supply the Bureau with these cases. I found that these things did not appear to be made in France. I therefore wrote to various firms outside of France asking them whether they had any agencies in France; they replied that they had not. So we had to purchase these book-cases in England. They were sent out here, and applications for free entry having been made to the French Government, pointing out that these were necessary to the Bureau in connection with its work, we were told that book-cases were obtainable in France. We pointed out that these particular book-cases were not obtainable in France. However, the French Government decided that duty must be paid. We have paid considerable duty on these book-cases.

Yesterday a little roll of charts arrived for Captain Björset. No notice was given that this was going to be sent. Previous notice must be given to the French Governments before exemption from taxation is granted. Duty to the extent of 4.80 francs was payable on this small roll of charts. It is quite true that these sums are very small, but in the aggregate at the end of the year the sum expended is considerable; so that this is really what it comes to: we have to purchase things in France which are not exactly what we require. Monaco, as you know, is on a special basis with reference to contributions; France is not. France pays a very considerable contribution, but in practice France has some advantage over other nations. She pays a certain contribution, and takes some of it back again, which no other nation is in a position to do. Though theoretically there are no taxes in Monaco, in practice the Bureau has paid a considerable amount in taxes.

M. Butavand (Monaco). — I thank the Delegate of Spain for his kind words in reference to the Government of the Principality.

May I be permitted to answer in a few words the information which the Secretary General has just given.

It is true that there are no taxes, and probably there never will be any, in the Principality; but there are taxes, which we have freely undertaken by treaty with our neighbour to levy whenever we are asked to do so. In this manner, certain commercial, excise, *etc.*, taxes have been instituted. Besides, the Principality being surrounded by French territory, it has been thought well — with the full freedom of an independent and sovereign State — to enter into community of Customs (Zollverein) with France. Of course, this carries with it certain liabilities, and it is not for the Government of Monaco to give satisfaction to the very legitimate desire expressed by the representative of the Hydrographic Bureau.

When I spoke just now of exemption from taxes, I was thinking of this: in the Principality there are no property or income taxes, neither are there any rates. Thus, if the transfer of the seat of the Bureau into another country be considered, it is perhaps not unnecessary to foresee all eventualities which might crop up in this connection. It would be particularly useful, in the interest of the Directing Members and of the Personnel of the Bureau, who may be called upon to pay income taxes on their private incomes and on the statutory salaries paid by the Nations which constitute the Bureau, to know exactly how matters stand in this connection in the country to which they are going and which generously offers them hospitality. It is for this reason that it appears to be of interest to know how the Members of the Bureau will be situated from the point of view of taxation and, at the same time, to know what Customs facilities will be granted. It must be kept in mind also, that perhaps other countries will make proposals, some day, similar to that made by Spain, but even more generous and these might possibly cause the Bureau to go into the question again.

Captain Schweppe (Germany). — I have been considering the question "Who are the most interested in the place where the seat of the Bureau

should be?" Is it not we, the representatives of Hydrography of our respective countries, and not the Naval Attachés? That is why I maintain my proposal.

Mr. Richards (Egypt). — I am sorry to prolong the discussion, Sir, but I cannot make up my mind on this question. The remarks of the Secretary General have cast a very great light on the subject and I feel I want more time in which to consider those remarks. I should feel much happier, if, before we take a vote on this question, a report could be made by the Bureau or the Secretary General on the general state of affairs existing here in Monaco, setting out the advantages and the disadvantages of the work of the Bureau being performed in this beautiful city. That would help us to make up our minds on the subject and at the same time this report would form a guide to any mission which may be sent to Malaga as to the lines on which their investigations should be made. I think that the question ought to be postponed until we have had such a report from the officials of the Bureau who know something about the working of it. I, personally, know very little about taxation, *etc.*, and I want information on those points before I vote. I suggest that a decision on this question should be postponed. There is no hurry about it as I believe we have a lease of our present premises here for some years to come and any premises which might be built in Malaga would not be ready for some time. If we got a report by the Bureau and if a subsequent visit to Malaga could be arranged, then the States Members could give their opinion as to what should be done. I should like to propose that this line should be taken.

M. Butavand (Monaco). — Referring to the information recently given by the Secretary General, I note that in the "Report on the Financial Administration of the Bureau" that the expenditure on transport and Customs dues were as follows:

1,050,20	Swiss francs in 1921.
385,40	" " " 1922.
377,10	" " " 1923.
330,15	" " " 1924.
120,05	" " " 1925.

This is but a small matter if this sum be compared with the taxes which the Members and employees of the Bureau will pay if they go to a country where there are very probably numerous taxes, for I presume that Spain, as have many other countries, has established an income tax and, assuming this to be correct, I ask whether the above-quoted expenditure on Customs dues can be compared with the thousands of pesetas which the Members of the Bureau would have paid in the form of taxes.

I agree entirely with the opinion expressed by the Delegate of Egypt, namely that, if the Nations are much interested in the material side of this removal, the Members of the Bureau are no less interested. I consider it an excellent idea to request, in the first place, the Directors, the Secretary General and the Members of the Staff of the Bureau, who have had great experience and who have lived some five years in the Principality, to give a personal opinion, which will be issued as a report, on their own interests, which we have at heart and which should be taken into consideration. When we have considered this report, we will look into the question of sending a mission to Malaga to study the problem on the spot.

The President. — The question is, shall we send a Commission to Malaga? Will those in favour kindly raise their hands?

(The proposal was rejected by 10 votes against 4).

The President. — The sitting is adjourned for ten minutes, but I would ask the Delegates to be punctual in returning.

On resuming.

The President. — Is there more to be said on the subject of Malaga ?

Lieutenant-Commander Lopes (Portugal). — In view of the necessity that the International Hydrographic Bureau should have a building suited to its work, and in view of the kind hospitality of Monaco, always having before us the recollection of Prince Albert, to whose memory I offer most respectful homage,

I propose the following compromise :

"The International Hydrographic Bureau will approach the Government of the Principality of Monaco with the object of obtaining a building in which the Bureau could have all accommodation necessary for its work.

"Should this result be impossible, the transfer of the Bureau will be considered and such transfer might be to Malaga, in view of the generous offer of the Spanish Government."

The President. — The Delegate from the United States, who very much desires to terminate this discussion, moves that the Conference instruct the new Directors to learn all possible facts about the Malaga proposition and submit them to the States Members for decision.

Captain Douglas (Great Britain). — I support that.

Chile, Germany, Argentine, Italy and Greece also supported the Motion.

The President. — Are there any who wish to speak on this ?

M. Butavand (Monaco). — I thank the Hon. Delegate of Portugal for the homage offered to the memory of Prince Albert, who gave his life to the study of maritime and hydrographic questions.

With reference to the proposal which he has just submitted to us, the Government of the Principality of Monaco, of which Government I have the honour to be a Member, will study with the greatest attention the requirements which may be set before it in this connection. In the first place, the Bureau should examine the question and, consequently, should, when drawing up the report on the Malaga offer, go into the question of the accommodation or improvements which it may consider necessary in the Principality. A priori, the Prince's Government gives an assurance of good will in this matter, but for the moment I cannot say more than that, for I am not authorised to enter into any engagement whatsoever being but a Member of my Government. I would have to refer the question to it and it would then be obliged to refer to our Sovereign.

The President. — The Chair understands that the motion now before the Conference includes both sides of this question : Monaco-Malaga ; that an investigation into the subject must include that ; therefore the motion is that the question of moving the seat of the International Hydrographic Bureau to Malaga shall be thoroughly investigated, including Monaco and Malaga, and reported to the States Members for their decision.

Those in favour please indicate by raising a hand.

Eighteen in favour.

(Adopted).

ADOPTION OF A TABLE OF VOTES.

The President. — The question is now upon the acceptance or rejection of the list of Votes and Contributions submitted by the Bureau and adopted by the sub-Committee.

Commander Brandon (Great Britain). — Mr. President, as a Member of the Statutes Committee and on behalf of the British Delegation I beg to protest against this Table being considered by the whole Conference until the Statutes Committee has reported. This Table was adopted by the Statutes Committee at the end of their sitting yesterday, but the Minutes of that sitting have not yet been circulated or passed by the Members of the Committee.

The President. — The last Speaker confirms the information received by the Chair from the Chairman of the Statutes Committee, who reports orally that the list has been accepted by the Statutes Committee.

Captain Björset (Norway). — That is right.

The President. — Are there other remarks? Is there a motion?

Commander Brandon (Great Britain). — I wish to propose, Mr. President, that the consideration of this Table be postponed until the Statutes Committee has reported, and I wish to state that I carefully explained to the Chairman of the Statutes Committee, on two occasions yesterday, that I considered that that was the procedure which should be followed.

The President. — Is there a second to the motion?
(*Various hands were raised*).

The President. — It is moved and seconded that the consideration of the Table concerned be postponed until the Report of the Committee on Statutes is considered in Plenary Session.

Captain Björset (Norway). — I told the President that Articles 34 and 35 in connection with this list had been adopted.

The President. — Are you ready to vote? Those in favour of postponing the consideration of this Table please indicate by raising a hand.
(*Six in favour*).

Those opposed? It will not be postponed. The question is now upon the list? Are you ready to vote?

M. Butavand (Monaco). — Am I to understand that it is a question of voting on the amounts of the contributions of the various States?

The President. — Yes, and on the votes.

M. Butavand (Monaco). — This revision of the contributions will be provisional if the offices are transferred to Malaga, for the cost will be certainly increased in view of the higher cost of living. In making such revision of the amounts of contribution, are we not likely to be somewhat premature or, at least, of doing, something which will not last?

The President. — The Chair replies that if any Delegate can bind his Government to a contribution, it must be a small minority of this Conference. Therefore, while the amounts have been stated by the Bureau, they must be accepted by the Governments before those Governments will pay them.

Is there a motion?

With apologies from the **Delegate of the United States** — in view of the fact that the number of votes of the United States has been increased — the Delegate has hesitancy in moving the adoption of the Table, but as no one else has so moved, the Delegate from the United States moves that this Table be adopted by the Conference for the coming election.

Is there a second?

(*Chile, Germany and Japan supported the motion*).

The President. — It has been moved and seconded that the Table which has been circulated, and for which time has been allowed for study, be applied by the Conference for the coming election.

Are you ready for the question?

Those in favour of adopting this Table please indicate by raising a hand.
(*Sixteen in favour*).

(*Adopted*).

Recess until 1415 this afternoon.

The Members of the Statutes Committee are requested to meet immediately

at the table in the rear of the room. It is for that purpose that the Plenary Session is adjourning.

The meeting adjourned for lunch at 1130.

On resuming.

REPORT OF THE ELIGIBILITY COMMITTEE.

The **President**. — Two further reports have been received: the "Work of the Bureau" and "Eligibility".

As soon as the Staff of the Bureau can translate and prepare the "Report on the Work of the Bureau", it will be distributed in sufficient numbers in order that Members may give it their personal consideration before it is brought up before the Conference.

The Report of the Eligibility Committee is short and finds all candidates eligible. It will be read.

The **Secretary General**. — Report of the Eligibility Committee:

"The Committee to which it was remitted to examine whether the candidates offering themselves for the duties of Directors and of Secretary General of the International Hydrographic Bureau fulfilled the conditions provided for by the Statutes, met upon 5th November, and, after examination of all information given by the Secretary General, expressed the following opinion:

1. *Date of declaration of candidature.*

"The Committee has ascertained that the declarations of all the Candidates arrived at the International Hydrographic Bureau within the limit of time prescribed by Article 59-(1) of the Statutes, except in so far as Admiral Hosemann is concerned. Admiral Hosemann's candidature has already been accepted by the Conference, sitting in Plenary Session, on 3rd November."

2. *Qualifications of the candidates.*

"The Committee, after having examined the Statement of Service of each Candidate, is of opinion that all fulfil the conditions provided for by Article 22 of the Statutes".

The **President**. — The question is upon the adoption of the Report of the Eligibility Committee. Are there any comments? Will a Delegate move the adoption of the Report?

Commander Gerken (Chile) moved the adoption of the Report, and it was seconded by the Delegation of Germany).

The **President**. — It is moved and seconded that the Report of the Eligibility Committee be accepted. Are you all in agreement? Those in favour of adopting this Report will please so indicate by raising their hands.

The Report was adopted.

The **President**. — Is the Conference ready to elect the new Directing Committee and the Secretary General?

ELECTION OF THE MEMBERS OF THE DIRECTING COMMITTEE AND OF THE SECRETARY GENERAL.

M. Butavand (Monaco). — In reading the list of candidates, I notice that the name of our good friend Admiral Phaff has been crossed out. I venture to ask for confirmation of his withdrawal.

The **President**. — The Chair announced this morning, in the absence of M. Butavand that, Admiral Phaff's candidature had been withdrawn by the Delegation from the Netherlands on account of ill-health, and at his own request.

M. Butavand (Monaco). — I thank you for your explanation.

The name of Admiral Hosemann, of German nationality, has been added to the list of candidates. I would like to know who proposed Admiral Hosemann, Germany alone, or several Delegations?

The President. — So far as the Chair is informed, the candidature of Admiral Hosemann is proposed by Germany alone.

Captain Schweppe (Germany). — I agree.

Captain Douglas (Great Britain). — Before proceeding with the election of the Directors, I would like to call the attention of the whole Conference to the remarks on page 3 of the minutes of the Meeting of November 2nd. To save reference I will read them out:

“The President. — Please consider for the moment the Statutes governing the election of the Directors. The Chair is informed that some have thought that this Conference can change those Statutes so as to affect the coming election. This is obviously inadmissible.”

In view of the majority vote of this morning to the effect that the Statutes can be altered to affect the coming election I hope the President will therefore publicly rescind these remarks.

The President. — I would like to remind you that many lawyers get quite rich because wise men differ at law. The Chair finds it impossible to accede to the request of the Hon. Delegate from Great Britain, and invites attention to the following facts.

The decision referred to on 2nd November states in fact that the Statutes cannot be altered for the coming election. In the opinion of the Chair, this has not been done. The Statutes are quite clear that the Directing Committee of the Bureau shall do certain things, the keeping of the Statutes correct as to fact, being one of them. This has not been done, and it has therefore been the duty of the Conference to accept, as per Statute, a table furnished since the Conference began its sittings. In the opinion of the Chair, there is no inconsistency with the ruling of November 2nd and the adoption of a table which should have been prepared before this Conference met.

Admiral Niblack (Director of the I. H. B.). — The communication from Germany as to payment of dues was received on Saturday, Oct. 30th. When the Conference met, October 26th, the President announced that Germany had joined the Bureau and this fact established Germany as a Member because, under the Statutes, she had a perfect right to join, being a Member of the League of Nations. At the first subsequent meeting, on November 5th, I was representing Admiral Phaff on the Committee, in his absence, and drew attention officially to the fact that the table referred to should be corrected for Germany, both as to the tonnage given, and as to the contribution payable, as it had then become a matter of fact; and under the direction of this Conference the data were entered in the table. Now clearly, under the Statutes, when a country gives notice of a change in its tonnage, that is a fact which automatically changes the amount of money which it should pay to the International Hydrographic Bureau. Therefore it is not within the province of any country whose amount of contribution is changed to make any comments or to approve or disapprove, because, under the Statutes, this automatically becomes a fact. The country has, by approving the Statutes, automatically to stand by the fact. It is not, for instance, for the American Government to say that it will not pay an additional amount based on a tonnage which it has furnished to this Conference. If it does not like it, it can resign, but it cannot make any comment on something which is automatically a part of the working of the Statutes. Therefore, though the matter seems to reflect in a way upon the Committee for not having corrected the table in advance of the meeting of this Conference, as a matter of fact, according to my lights and

the lights of the Directing Committee, we left the Conference to settle the matter in a perfectly regular manner. I see nothing to criticise in the action of the Directing Committee. I have done what I thought right in connection with the Statutes, and cannot see that the Committee has failed to notify the Conference in any but a regular way, since the moment the Conference meets, the Directing Committee's authority ceases.

The President. — Referring again to lawyers who get rich attempting to interpret written and spoken words, the Chair apologises for saying anything which might be construed as a criticism of the Bureau. The Chair stated that a table should have been prepared believing while so stating that all of us knew why it was not prepared, I know, and I believe all have been told. There is no fault suggested or desired to be suggested. It is a statement of fact only.

Captain Bjørset (Norway). — I would like to draw your attention to the Resolution which was taken yesterday afternoon in a meeting of the Statutes Committee :

"The Statutes Committee is of opinion that all the changes in the Statutes recommended by this Committee and which may be adopted by the Conference shall take effect as from the moment at which they are adopted, with the exception of the introduction of the gold franc, regarding which a special recommendation has been made".

The President. — The Chair is then led to believe that the actual question now before the Conference is whether or not Statutes have been changed by the correction of the table.

He invites attention of the Delegates to the fact that if a misprint had been discovered and corrected, that would not be a change of Statute. Disclaiming any legal ability, the Chair is formally of the opinion that the Statutes have not been changed. It is for the Conference to decide upon this point.

Captain Douglas (Great Britain). — I think, Sir, that I started this discussion with some remarks about your statement on the 2nd November, and all I wish to add is that I am very much obliged to you for your opinion on the matter as regards this reading. I now want to refer very briefly to Article 59 of the Statutes of 1923, page 19, where it is stated that the appointment and election of the Directors and Secretary General "shall be held by secret ballot at the end of the Conference". I should very much like to think that this is the end, but I fear we have a long way to go yet ; for that reason I should like to call the attention of the President and the Members of this Conference in full session to that Article. I think it is a matter of considerable importance, anyhow from the point of view of the British Delegation.

The President. — I made that statement in order to avoid losing time. The Chair asks for the desires of the Conference on this point.

Mr. Richards (Egypt). — There is a point, Sir, which has struck me — with all humble apologies to the Chair I agree entirely with the ruling of the Chair on the Statutes — I voted in favour of adopting this table this morning, because I considered that it conformed with the Statutes. My opinion incidentally is of little value as I am not a lawyer, but I would like to know at what date the Table of Contributions comes into force. Perhaps Admiral Niblack would be able to inform us. Does it come into force from this date ? Is a proportionate part payable ? I do not think the Statutes say anything about that, therefore I suppose the Conference will decide.

Admiral Niblack (Director of the I. H. B.) — Mr. President, in reply to the question of the Delegate from Egypt, I would inform him that all Governments have paid their contribution for the year 1926, or are obligated to do so. It is therefore impossible for a new contribution to come into force

until after the 1st January 1927. It is for the Conference to decide whether the new Statutes come into force before that date.

The President. — The Chair would be glad to entertain any motion as to when the elections shall take place.

I take, it referring again to an interpretation of words, that it will be wholly impossible to hold an election at the extreme end of this Conference, that, is at the last minute. A tentative programme has been prepared with the object of losing as little time as possible, and considering that two Committees must meet at least once more, and, endeavouring to meet the wishes of the British Delegation, time is very short. The Chair has no personal wish in the matter whatever, but requests someone to propose a date.

Captain Fablet (Argentine). — I cannot make a proposal as to the date of these elections, but I note that there is some doubt, in the minds of some of the Members of the Conference on the subject of whether the forthcoming elections will be held in accordance with the unmodified Statutes or with the Statutes brought up to date.

I request that the Conference should decide this question by vote.

The President. — The Chair has announced its opinion that there are no new Statutes concerning the coming election. The Chair has asked for an expression of the opinion and wishes of the Conference on this point. My own opinion is fixed — the Statutes have not been changed. If others have different opinions will they please express them?

Commander Brandon (Great Britain). — Mr. President, in response to your request that someone should state an opinion if they hold one different from your own, may I say that, at the plenary session on November 4th, I stated to the Conference, as a Member of the Statutes Committee, that the view "had been represented and found general support in the Statutes Committee, that the tables of Tonnage, Shares, Votes and Contributions contained in Articles 34 (b) and 35 (a) form an integral part of the Statutes and therefore, as long as the ruling of the Chair remains in force, they cannot be altered". That view, Mr. President, was strongly represented in the Statutes Committee — not by myself, I should say — and was endorsed by a considerable majority. But as the whole question seems to have come up afresh, may I also draw the attention of the Conference to the fact that a resolution was passed by the Conference, at that same plenary Session, to the effect that the subject of a new table concerning countries, tonnage and votes, should be postponed until a certain Committee, namely the Statutes Committee, could report, and that resolution was in force until this morning's decision. I am not clear whether this morning's decision rescinded it or not.

The President. — The Chair thinks it necessary to correct the belief of Captain Brandon in one respect. He is correct as to the reference to the Committee but he has forgotten, or he did not learn, that the Committee reported this morning in favour of adopting the table for the election, and the Conference agreed to that. There has been nothing illegal connected with this procedure.

Commander Gerken (Chile). — I have the honour of being a member of the Statutes Committee and I wish to make a reservation on behalf of the Chilean Government about the statement just made by the President of the Statutes Committee. I am here as the Chilean Government Delegate and not as a Minister Plenipotentiary, therefore any change in the Statutes which is made here is in no way binding on the Chilean Government until the Hydrographic Office has approved it and informed the Government, when the Chilean Government would inform the Bureau here that it has approved such a change in the Statutes. I wish also to point out that I voted this morning in favour of the table because I thought it was in accordance with the old Sta-

tutes and that the election would be in conformity with those Statutes. I wish therefore to make this reservation with regard to the Statement made here by the Chairman of the Statutes Committee, with which I do not agree.

The President. — It may be appropriate to state what I believe to be a few important facts. The Statutes require that a certain method shall be followed in determining the amount to be paid by States Members and the numbers of votes controlled by their delegates on that account. It was not possible, through the fault of no one, to present a correct table to this Conference when it first met. The table, through a sub-Committee, a Committee and the Conference, has been accepted. Some table had to be accepted; a table prepared by several has been accepted. The Chair can say that there can be no further discussion on that question. If the Conference wishes to express its opinion as to whether this procedure was legal or not, that is to say, whether or not this table can control, it is at liberty to do so.

Captain Björset (Norway). — With respect to Commander Gerken's remark I will propose to him that in connection with the election of the German candidate it might be sufficient to add to Article 37 the words "that such alterations would be submitted to the Conference for approval at the first plenary session". If accepted by the Conference it could be stated that the motion was taken by a show of hands and adopted.

The Chairman. — The Chair expresses the opinion that the Article just quoted fully conforms with the previously expressed opinion of the Chair.

Mr. Richards (Egypt). — I beg to propose, Sir, that the election of the Directors and Secretary General should take place now.

This proposal was agreed to by:

Brazil	Greece
Chile	Japan
China	Monaco
Denmark	Netherlands
France	Norway
Germany	Peru.
	Sweden

The President. — It has been moved and seconded by a large majority of Delegates that the election of the new Directing Committee and of the Secretary General take place now. The Chair therefore rules that the election will be held immediately and an informal recess is declared during which Delegates will have time to fill up their voting papers (which are now being distributed) in accordance with the numbers of votes allowed. I would remind you that names of persons and not States should be inserted on the papers.

Interval.

ELECTIONS.

The President. — Will Captain Luymes, Captain Lopes and Captain Caballero y Lastres, the Committee appointed to count votes, please come to the Chair.

The Committee with the Voting Box will approach each voting Delegate who is requested to place his votes in the box; one at a time in order that they may be counted by the Committee.

Here followed the counting of the votes during which interval various minor announcements of a social nature were made and also the following suggestion:

The President. — The Chair would welcome a motion expressing the thanks of the Conference to the French Government for its kindness in giving the Delegates the opportunity to visit the Surveying Vessels "Beautemps Beupré" and "Alidade" and the interesting instruments installed in these

vessels. A further expression of gratitude to the Captains and Officers of these ships for their most cordial reception might well be moved also.

Are there any objections?

(*Applause*).

The President. — Carried.

M. Fichot (France). — In the name of the French Delegation and of its Government I thank the Conference.

The President. — Delegates are informed that in accordance with the Resolution adopted by the Conference the votes of Siam and of Poland were handed by our President to this Committee which opened the envelopes and deposited the votes.

The Committee appointed to receive and count the votes has made a unanimous report, and the following is the result of the election :

	<i>Votes</i>	<i>Points</i>
Admiral Niblack.....	103	241
M. de Vanssay.....	93	201
Captain Tonta.....	76	147
Captain Björset.....	70	125
Admiral Hosemann.....	22	42
Captain Chryssanthis.....	27	40

The Chair therefore announces that the new Directorate will consist of :

Admiral Niblack

M. de Vanssay

Captain Tonta.

(*Applause*).

In view of the expressions of pleasure, the Chair assumes that the Conference joins it in congratulating those present who have been elected.

There being no objections, congratulations are rendered.

For the benefit of those who may wish for the information, I would say that 205 points were necessary in the first case for a majority, and 241 were received; in the second case 137 points were necessary for a majority, and 147 were received.

The Chair now takes the liberty of suggesting that the Statutes be violated in part. As you are aware, there is but one candidate for the position of Secretary General. No balloting papers have therefore been prepared. It would be possible to write them and put them in a box, but to my mind that is an unnecessary formality. I therefore suggest that the election of Captain Spicer-Simson as Secretary General be made unanimous, and by a show of hands.

A vote was taken by show of hands, and Commander Spicer Simson was unanimously elected.

The Chair has the right to assume that this is a well deserved vote of confidence.

The Chair announces that the following Committees will meet on Monday morning at 9 o'clock :

The Committee on Tides in the Offices of the Bureau on the third floor;

The Committee on Charts will meet here (the Museum);

The Committee on Statutes will meet in the Library of the Bureau.

Members are requested to attend these meetings.

It is hoped that the remainder of next week may be devoted to Plenary Sessions as may be necessary.

I would remind you once more: — 9 o'clock in the morning, and 2 o'clock (14 o'clock) in the afternoon.

Admiral Niblack (Director of the I. H. B.). — I would like to make a

remark in connection with Article 23 which reads :

" The Members of the Committee shall be appointed for a period which terminates on the last day of the third month succeeding that during which the new Committee has been elected ".

That means that the new Committee will take office on 1st March. I want to ask, as a special favour, that this shall not debar anyone from taking office sooner. I think for the sake of the efficiency of the Bureau, and with all the work that must be done after this Conference, the Directing Committee is entitled to have three members ; it has only two at present. There is nothing in the Statutes which says that a member elected shall not take office immediately in case of a vacancy, and there is one at the present time. It does say that this office shall terminate at a certain time. I therefore ask the Conference, as a favour, to consider during the coming week the proposal that M. de Vanssay be requested to take office on 1st January to assist the other two Directors. We feel entitled to some assistance considering the amount of work we have to do. There have been only two Directors for so long, and it would add to the efficiency of the Bureau if he could take office then. As I have said, there is nothing in the Statutes against this proposal.

The President. — This matter will not be put to the vote now.

M. Fichot (France). — Perhaps the question does not depend solely on the Conference. In point of fact, M. de Vanssay holds a high position in the French Hydrographic Office and, before he can come here, he must be placed on the Retired List and then hand over his work. Therefore I cannot permit myself to be tied down by a vote of the Conference. We will do all that is possible to reconcile the interests of the Bureau with those of the French Hydrographic Service, but I cannot undertake to let M. de Vanssay go at a date fixed by the Bureau.

The President. — The Chair requests that Members consider this matter and be prepared to express an opinion next week. Unless there are any objections, this session is adjourned until Monday afternoon at 2 o'clock.

The meeting rose at 1750.

CHAPTER VI.

The sixth Plenary Session was held on Monday, 8th November 1926, the Vice-President in the Chair.

The President. — The Session is open.

I am requested to announce that the flags indicating the Nationalities of the Delegations are presented to the Delegations by the Bureau. Those finding it necessary to leave before the close of the Conference may take their flags with them.

Captain Douglas (Great Britain). — I will just mention the fact that I have been able to arrange, in spite of the information I gave the other day to the effect that the British Delegation would have to withdraw on Wednesday afternoon, that, should the session continue after that date, Great Britain will still be represented, so that the flag will still be flying.

The President. — There are being distributed proofs of the report mentioned of the session attended by M. de Rouville and Commander Norton of the League of Nations.

The attention of Delegates is directed to the fact that Thursday next, being Armistice Day and an official holiday, the tables at which Delegates are now seated must be returned to the source from which they were obtained. This alone will seriously handicap a session. It appears to the Chair, therefore, that this session must close about noon on Wednesday, the day after to-morrow. Delegates are requested to consider this before rising to prolong discussion.

The proposal that a Supplementary Conference should be held in 1929 has been distributed, and will be discussed as soon as convenient.

The Chair suggests that the Conference instruct the Secretary General to express to the Municipal Authorities the appreciation of the Delegates for the magnificent display of fireworks made in their honour last night. (*Applause*). If there are no objections this will be done.

Admiral Niblack (Director of the I. H. B.). — I will go in person to see that this is done.

REPORT OF THE COMMITTEE ON THE "WORK OF THE BUREAU"

The President. — The report of the Committee on the "Work of the Bureau" has been distributed, and doubtless Delegates have had time to read it. There being no other report ready for consideration, the Chair proposes to pass to the examination of this Report. To obtain more rapid results, the Chair will divide this report as follows:

- (a) Past Work.
- (b) Future Work.

(a) PAST WORK.

As a part of (a) the unanimous agreement of the Committee is quoted in the third paragraph:

"Satisfactory progress had been made generally, in endeavouring to complete the work entrusted to them, but the Committee are of opinion that, of the work detailed, further investigations are necessary before their task can be said to have been accomplished".

Is there any comment on this?

Admiral Niblack (Director of the I. H. B.). — I wish to invite the attention of the Conference to the fact that there is some disagreement by the minority in the Report of the Chairman which also summarises in some way the actual report of the Committee, because, as stated by the Chairman of the Committee on Work of the Bureau, only a certain number of its Members were present. I wish to disabuse the minds of the Delegates of the two countries in the minority which have taken exception to the past work of the Bureau and which now seek to limit its future work, by stating that they were each represented on the Directing Committee by a Delegate from their own countries and it would seem they might have been able to influence their own representatives on this Committee, but it is laid down or is assumed in the Statutes that when a Director is elected he no longer represents his own country, in any way. I do not represent the United States of America in any sense and I hope there is no reflection upon the other two Directors and myself, in saying that what has been done by the Committee has been done according to their own judgment, and not to please their own countries.

Admiral Phaff wrote me last night and congratulated me saying that no better appreciation could be expressed by the Conference of the quality and usefulness of the work that has been done in the last two years.

I bring my personality into this only because there has been certain dissatisfaction expressed regarding the past work of the Bureau, with reference to the tabulations prepared. If Great Britain or the Netherlands state that this work is unnecessary, then it must be pointed out that the work has been prepared from data supplied in all Sailing Directions. If the tabulations which have been made and corrected in detail and which now serve as a basis for future reference, if there is any criticism of the importance of laying before the Hydrographic Offices information which is useful, if the Netherlands or Great Britain say that it has been a waste of time or money, then I would say that some of the money has been very freely given by the Hydrographic Office of the United States of America. Is it a waste of time and money that the British Hydrographic Office gives the same data in their Sailing Directions that we have given in the tabulations? All I need say, however, is that whatever is decided with regard to the future Work of the Bureau, you need not worry about the question of the tabulations of Buoyage and Buoy Lighting, Coastal and Port Signals and Saving of Life, for all this work is now finished. I repudiate the idea that the time has been wasted, because what has been done is of very great importance to seamen, and it has been done at relatively small cost.

All the other Work of Section 3 of the Hydrographic Bureau has been important also, and I ask you to be very careful as to limiting the work of the other Sections of the Bureau. If you should, by any chance, decide that in the past the Bureau has wasted time and money on its work, then I would say the work has been done, the money has been paid, the affair is finished, and there is no necessity to try to limit the Work of the Bureau in the future because anyway we have simply done what we felt we had to do. If a Hydrographic Office of a Member asks us to do something, we must attempt it; we have no choice, for if we refer to the Statutes, Article 17 says that we must give a considered opinion when requested. In an advisory capacity, we give an opinion on many questions.

Naturally it has been very difficult in the first five years of a new Organisation to know exactly what should be done. At any rate we have now before us a new period of five years. We start with the inspiration of this Conference and we ask you simply to leave the Statutes in the hands of the Bureau, more or less as they are. Then the Bureau will not be hampered by traditions of older Hydrographic Offices which are not necessarily shared by other countries which are just beginning to build up their Hydrographic Offices.

The President. — The question is upon the adoption of the quoted part of the third paragraph of the report of the Committee on the Work of the Bureau.

Are there comments or objections?

(Adopted).

The President. — Unless there are objections to the decisions of the Committee in the fourth paragraph, they will be adopted.

Paragraph 4. — "In this connection "II-Contours of Depth" and "III - Common abbreviations" were referred to the Committee on Charts, and "VI - Compilation of List of Lights, and "VII - Visibility of Lights and the Adoption of a Formula" to the Documents Committee, whilst it was decided that the Bureau should endeavour to obtain and publish the information required under 'V - Transcription of Names'. As regards 'IX - Distance Tables' the Bureau should not have waited for the decision on the Limits of Oceans and Seas, it being generally considered that the latter has no connection with the subject".

Captain Douglas (Great Britain). — I would just like to make a remark about paragraph 4. My Committee referred two questions to the Committee on Charts and Documents. I shall be happy to learn that they received those questions and are dealing, or have dealt with them. I only ask this for information because I feel, as Chairman, that I should know.

The President. — Will Commander Baldi please answer?

Commander Baldi (Italy). — The question of the arrangement of the List of Lights was examined by a sub-Committee and that of the Visibility of Lights by the Committee on Charts.

The President. — Is that satisfactory, Captain Douglas?

Captain Douglas (Great Britain). — Quite.

The President. — Did the sub-Committee consider this question, Commodore Reinius?

Commodore Reinius (Sweden). — The sub-Committee has considered Contours of Depths and Common Abbreviations, and both these questions have been referred to the Bureau.

The President. — Are there any objections to the adoption of Paragraph 4 by the Conference?

(Adopted).

The Président. — Paragraph 5 and 6. — "It is to be noted that in the report of the first Meeting of 28th October of the Committee on Work of the Bureau, page 1, paragraph *iv.*, Colour of Light Sectors, it is stated by the Bureau that the proposal was approved by all Members except Portugal".

"The Chairman of the Committee on Work of the Bureau is, however, informed by the Delegate for Portugal that this proposal has been approved by that State and that the Bureau's statement should therefore be amended accordingly".

These deal with the same subject and if there are no objections, they will be adopted.

(Adopted).

The President. — Paragraph 7 reads as follows:

"The Committee then undertook an examination of the publications of the Bureau as given in the Report, and after general remarks by various Members of the Committee, the following conclusion was formulated. 'The Committee takes note of the various researches and Publications of the Bureau and intends to discuss them in detail when the question of the Work to be accomplished by the Bureau in future comes under discussion.'"

The Chair recognises the Delegate from the United States who was a Member of this Committee and takes exception to this statement.

The conclusion as understood by the Delegate from the United States as a Member of the Statutes Committee was that the past Work of the Bureau should be approved.

Captain Douglas (Great Britain). — As Chairman of this Committee, I quite recollect (although I have not the Minutes of the three meetings by me) that it was suggested by the United States Delegate that the Work of the Bureau in the past should be put on record as active and valuable, but I do not seem to remember that that was agreed to by the whole Committee, and that is why, in my résumé report, I quoted these words: — "The Committee, takes note of the various researches and publications..." *etc.* I do not know if it is necessary to quote all this to every Member of the Conference, but if anyone would like to have further details I am quite ready to read them out, or be referred to in the matter.

The President. — Are there objections to the adoption by the Conference of paragraph 7 which has been read?

(*Adopted*).

(b) *FUTURE WORK OF THE BUREAU.*

The President. — Unless desired by a Member, this will not be read.

The Chair rules that the reading of this paragraph by Members who have had it before them amounts to a reading of it by the Chair.

Please consider now the first seven lines of the paragraph following the heading "Future Work of the Bureau", beginning "It was apparent" and ending with the words "Hydrographic Subjects".

"It was apparent that the Committee were not unanimous that the work undertaken by the Bureau, apart from that explicitly entrusted to them by the London Conference of 1919, was in the right direction and that the researches by the Bureau suited the requirements of the various States; moreover in the opinion of some of the States Members a departure had been made from the hitherto accepted definition of Hydrographic Subjects".

Are there any comments upon this sentence?

The Chair recognises the **Delegate from the United States** and announces that in his positive opinion the Bureau has not deviated from the work entrusted to it by the London Conference. He wishes that to be placed on record.

Captain Schweppe (Germany). — I support that declaration.

Commander Rasikotsicas (Greece) also supported this opinion.

The President. — This was not a motion. It was an expression of opinion.

If there are no objections, that part which has been indicated will be adopted.

(*Adopted*).

The President. — The sentence beginning "The Committee had the advantage..." and ending "investigations on these subjects" appears to need no comment.

"The Committee had the advantage of hearing a statement by Rear-Admiral Niblack, Director, in which he contended that subjects such as Port Signals, Coastal Signals, Buoyage, Storm Warning Signals, Lifesaving Stations, Safety of Life at Sea, and the International Code of Signals, were so interwoven with hydrography that the International Hydrographic Bureau should continue this work to which he had whole-heartedly devoted himself since his appointment as Director. It also transpired during the conversations that the League of Nations were relying on the Bureau to help them in their investigations on these subjects".

Is there any comment?

Admiral Niblack (Director of the I. H. B.). — In regard to the question of the relations of the Bureau to the League, we are trespassing on rather delicate ground. The main point is that, under Article 17 of the Statutes, the Bureau is to give a considered opinion on all questions dealing with the work which is referred to it by Conferences or by Scientific Institutions; it is all very well to try to define what the Bureau shall do, but we really have to do what we are asked to do. If the work is confided to three Directors, it should be the purpose of the Directors to put themselves in sympathy with the desires of the Hydrographic Offices, but these desires vary. Some have been established many years, some are in process of formation, and it might be very difficult to imagine what might be the attitude of various Hydrographic Offices on a given question. We are asked to give an opinion by these Offices. The Bureau is not like a phonograph in having merely to repeat the opinions given by a majority of the Members, because there is the very intelligent minority which has good reasons for its opinions based upon the experience of many years, and if there is no careful sifting you may have an inexperienced majority over-ruling the experienced minority on some questions.

Our position is that we must consider the particular aspect of what is to the best interest of all Hydrographic Offices, and particularly of those Hydrographic Offices which pay money as Members to maintain our Bureau. I find, not in Hydrographic Offices, but in many other Government Departments, a disposition not to regard so much the needs of the seamen, because they are politically voiceless; they have no direct representatives; so they consider the seamen are well repaid for port dues charged and that ought to be sufficient, but I call attention to an alarming condition of affairs in the maritime world with which the Hydrographic Offices should concern themselves.

We take our tabulations from data issued by countries to inform seamen as to the various buoyage systems, *etc.*, but often after we have published them we find that many changes have not been notified to the seamen. This leads to unnecessary employment of pilots and to lack of confidence in the information issued by the Hydrographic Offices. I have no quarrel with the pilots; on the contrary, they are hard-working experienced seamen, who know exactly what they are about. Possibly also, the charts themselves are sometimes incorrect, because information which has been obtained may not have had time to be circulated. So I do not think the Bureau should be too closely bound down by the idea that it is not its function to assist in collecting and publishing accurate information for seamen to have access to. I further wish to say that it is a very difficult situation in which we, the Directors, find ourselves, for even when anyone asks us questions about navigation methods, we do our best to answer them. Why not?

We have been drawn into the Work of the League of Nations. Its Committee on "Communications and Transit" had looked in vain for some source from which it could obtain information as to maritime matters. So, we have seen to it that such information has been forthcoming, and we are now prepared to answer all its maritime questions.

It is not necessary, I admit, that the Committee should express opinions too definitely with regard to what is the best international procedure, but it has had in mind that if we do not indicate clearly in what respect other international Conferences have violated existing treaties and existing international agreements, it will only lead to confusion. The interests of the Bureau are best preserved by indicating to any international Conference the fact that they must not make more confusion in attempting to straighten out what they think is wrong, but it is of advantage if they propose something which is worth working out.

The President. — Are there objections to the adoption of the two sentences indicated?

Captain Douglas (Great Britain). — I should just like to remark on that paragraph because Admiral Niblack said that the British Delegation have criticised the Work of the Bureau.

I think you will remember that our Committee did not for one moment criticise the work at all in that light. I, myself, am Head of a Hydrographic Department which consists of twenty times the staff of the Hydrographic Bureau, and I am fully aware of the amount of time that must have been put into the work which Admiral Niblack so wholeheartedly has taken on himself; and I should like to put on record that it is not my intention nor the intention of any Member of the Committee to criticise the actual output of the Work of the Bureau.

The President. — The Chair recognises the **Delegate from the United States**, who finds with the Chairman of the Committee on the Work of the Bureau, that those efforts which have been made by the Bureau should be approved, believing that this Conference should so express itself, and hoping that the Delegate from Great Britain meant that as a Motion. It is seconded by the Delegate from the United States.

Ex-officio.

Are there any comments?

M. Fichot (France) seconded this resolution.

The President. — The question is: shall the efforts of the Bureau in the past be approved by the Conference.

Those in favour of this Resolution please indicate by raising a hand.

It is practically unanimous; there are minor objections.

If there are no further comments or objections, the two sentences previously referred to will be adopted by the Conference.

(Adopted).

The President. — The attention of the Conference is directed to the next sentence beginning "After further discussion" and ending "between the two".

"After further discussion it was evident to the Chairman that, whilst some States Members wished to extend the functions of the Bureau to include in his opinion, purely Navigational subjects, as against the original conception of the organisation, *viz.* Hydrographical subjects, this was due to the fact that some of the smaller nations do not discriminate between the two".

The Chair recognises again the **Delegate from the United States** who, as one of those on the Committee on the Work of the Bureau who objected to some statements made to the effect that the Bureau was going or had gone beyond its rights, and in view of the statement in this paragraph that some of the *smaller* nations were of an opposite opinion to the Chairman of the Committee, I find it necessary to invite attention to the population of the United States of North America and the activities of its Hydrographic Office.

Captain Caballero y Lastres (Peru). — The report of the Committee on the Work of the Bureau contains an allusion to which I cannot refrain from referring seeing that I was a Member of this Committee in the discussions of which I took part. The Chairman of the Committee says that "certain *smaller* nations (*) do not discriminate between hydrographical and navigational questions". With reference to the importance of nations, they are all on the same footing here. I feel it my duty to say that we did not come to the Conference to receive a lesson on this subject. In all the Naval Colleges of the world, there are courses of Hydrography and the seamen of all Nations are perfectly aware, without being hydrographic surveyors, of what is navigation and what is hydrography.

(*) *Note.* — In the French text of the report, this was translated: "certaines nations, moins importantes".

If I approved the very valuable work of Admiral Niblack, it is because I consider it to have very great importance and because I am of opinion that it should be continued by the Bureau.

With what object does the Bureau do its best, in accordance with its Statutes, to advance the science of Hydrography, if it is not in view of making navigation easier and safer in all the seas of the world, as laid down in paragraph (ii) of Article 6 ?

We know very well that accidents at sea are due but very rarely to errors in charts ; most of such accidents are caused by currents, which are not well known, or by fog.

Seeing that one of the objects of the Bureau is to make navigation easier and safer, the paragraph which provides for the study of systems of buoyage, lights, signals during fog and, in general, everything connected with navigation, should be supported in order to reach uniformity out of the various systems.

As all the Members of the Bureau are quite aware of the definition of the word " Hydrography ", I do not consider it necessary to insert this definition in the Statutes as proposed by the Delegation of the Netherlands. Instead of limiting the Work of the Bureau it should, on the contrary, be given the widest scope possible by adding the paragraph which I propose. Various Hydrographic Offices insert on their charts data with reference to buoyage and buoy-lighting systems. I do not think, therefore, that the Bureau will meet with any difficulty in carrying out the work undertaken with so much success by Admiral Niblack.

Admiral Niblack (Director of the I. H. B.). — I wish to say that I think this is going a little too far. I think the statement made by the Chairman of the Committee on the Work of the Bureau is quite correct, and I do not see why we should go into this matter any further. It is absolutely laid down in the Statutes that we do not concern ourselves with navigational questions. I quite approve of the sentence as it now stands. We cannot avoid giving a considered opinion on tables of navigation when asked for it, and it seems to me we are getting pretty far afield if we go in for navigational subjects. It is very difficult to define where navigation ends and hydrography begins, but I think it is a perfectly safe sentence to adopt. Naturally it must be left to the discretion of the Committee to do their best to meet the needs of those who raise questions.

The President. — The Chair would like to suggest that Delegates now read carefully the second paragraph of Article 6 of the Statutes.

As an object of the Bureau :

" To co-ordinate the hydrographic work of these Services ". The hydrographic work is the work done by the Hydrographic Offices, not by the hydrographic ships. I will further suggest and read : " with a view to rendering navigation easier and safer " and invite Delegates to consider that a line cannot be drawn between navigation and pilotage. As we mostly know, navigation can be performed with a chart. Some Hydrographic Offices furnish a sheet of paper with certain lines on it which make it easier for a navigator out of sight of land to find his position. This is wholly unnecessary. He can make such a sheet of paper and do his navigation himself. He cannot make a chart and do piloting. The Chair suggests that piloting and navigation are closely allied and must not be wholly divorced. As this sentence reads to me, hydrography has but little if anything to do, excepting perhaps with reference to deep sea soundings and charting, with purely navigational subjects, but it has a lot to do with piloting.

The Chair recognises Captain Fablet as being the first to speak.

Captain Fablet (Argentine). — The Delegation of the Argentine agrees fully on this point with the statement made by the Delegate of the United States. Further, it requests the Chairman to cause the words " certaines

nations, moins importantes", page 3 of the French text of the report under discussion, to be suppressed and to substitute "certaines nations".

The Argentine Delegation does not think it necessary to explain the reasons for this request.

Captain de Oliveira de Sampaio (Brazil) supported this request.

Captain Douglas (Great Britain). — I think perhaps the translation of the word "discriminate" has not been an altogether happy one, or perhaps the use of the word in this connection.

I think it will be remembered that in this Committee the Honourable Delegate for Peru mentioned the fact that hydrography, as I was regarding it at the time, and navigation were dealt with by the same Department, that is to say, light-houses, buoyage and hydrography were all in one Department. Perhaps it would be better if we say "combine the two" and avoid the use of the word "discriminate". I think that is the gist of the whole matter. I am quite ready if a decision be taken to make that alteration if the phrase as it stands is in the least likely to be considered at all offensive.

May I add one remark. It has just been pointed out to me that the French translation of my remarks reads "of less importance". My word in English is "smaller" — a very different matter, particularly as I was referring to hydrography.

Captain Fablet (Argentine). — Yes, I agree, that is an entirely different thing.

Captain Luymes (Netherlands). — May I be allowed to differ from the opinion of the Delegate of the United States, that hydrographic work is work done by the Hydrographic Services.

The President. — Well, that is certainly so in the United States; there is no question about it.

Captain Luymes (Netherlands). — Well, in the United States it is so, but not everywhere else. The work executed or controlled by some Hydrographic Offices is often the result of chance internal organisation of governmental offices, and should not influence the work of our International Hydrographic Bureau. In my opinion, the whole thing rests on the exact meaning of the word "hydrography", — that means that navigation (pilotage) should not be brought within the province of the International Hydrographic Bureau. I quite agree with Admiral Niblack that it is very difficult to define the exact boundary between Hydrography and Navigation. There are certain things that no one thinks to belong to hydrography and others which nobody deems to belong to navigation. Certainly, many things are doubtful; no one can gainsay that. But there have been matters dealt with in the last few years which, in my opinion, belong certainly to navigation and not to hydrography.

The President. — Commander Baldi wished to speak.

Commander Baldi (Italy). — The Italian Delegation wished to associate itself with the proposal of the Delegation of the Argentine in the matter of the suppression of the words "moins importantes"; but as this sentence has now been modified my remark has no longer any point.

The President. — It has been moved and seconded that the last part of the sentence under discussion beginning with the words "the fact that some" following these four words, read "some nations combine the two" instead of all that which now follows the word "some".

Is the Chair correct in this interpretation of what has been said?

Captain Caballero y Lastres (Peru). — I approve the wording proposed by the President.

Captain Fablet (Argentine). — That interpretation is quite correct.

The President. — Assuming that all members now know how this sentence reads, the question is upon its adoption. Are there any objections?

(Adopted).

The President. — The Chair finds that it is now 3.30 and the Conference, if there is no objection, will recess for ten minutes.

On resuming.

Captain Hooykaas (Netherlands). — I heard, with satisfaction, that Admiral Niblack, himself, finds it difficult to lay down a line of demarcation between hydrographic and navigational questions.

It is for this very reason that the Netherlands' Delegation submitted these questions to the Conference, with a definition of the word; if seems to me to be somewhat inconsequent that the Members of the Bureau be asked not to delimit the future work of the Bureau. On the contrary, it should be satisfactory for the Directors that this question be answered by the Members of the Conference. It is indispensable, not only in our organisation but in all organisations, that the limits of the work and the objects of the organisation be laid down in the Statutes and determined by the Members.

I used the expression "waste of time and money" and I firmly believe that the truth of these words has already been very fully confirmed by the Chairman of the Committee, to wit:

1. The impossibility for the greater number of Hydrographic Offices to do anything whatsoever in this connection because buoys, lighting, port signals *etc.*, have absolutely nothing to do with their Offices. All this work of the Bureau may be summed up as a great loss of time and money giving no result.

2. We would be doing work already commenced by another organisation of the League of Nations, which organisation is composed of much greater experts than we are. I am sure that, if M. de Rouville were here, he would support my opinion. In fact he has already made this statement to us.

I will close by putting forward a small amendment to our definition. As suggested by the Delegate of the British Empire, we would add the words:

"Magnetic and astronomical observations connected with surveys" to paragraph 2. I wish to call special attention to the words "connected with surveys" for we are not astronomers and we use such observations for the sole purpose of checking a triangulation.

Commodore Reinius (Sweden). — In my opinion the central points in those objects of the Bureau are sufficiently clearly indicated in the Statutes and it is of the greatest importance that the Directing Committee should concentrate upon those objects. The *principal* task for the Bureau is, in my opinion, expressed in Art. 6 (ii) in the Statutes which reads "to co-ordinate the hydrographic work of these services with a view to rendering navigation easier and safer in all the seas of the world". The other points in the same article seem to a certain degree to constitute the means which are to be used for gaining this principal purpose. The work which is executed by the Hydrographic Services comes frequently in contact with many activities which also are intended to "render navigation easy and safe", but for most of them such an international organisation as we have here in the International Hydrographic Bureau, is lacking in the other organisations. It seems to me, on account of that, evident and quite correct that the Bureau should have both the right and the duty to take the initiative or call attention to important questions though they belong to the province of the organisations and give rise to overlapping activities, on the definite assumption that no more heavy expenses or extensive work is thereby entailed. It seems to me unwise, if not impossible, to cut off the Directing Committee from all those important activities which are in close contact with the work of the Hydrographic Services. A development or modification in those overlapping activities will now and then even

cause changes in the purely hydrographic work. To this must be added that the great nautical experience and judgment which, commonly, is to be found in the Hydrographic Services as well as in the Bureau, may at least to some extent also be used for closely overlapping activities. The limits for the work of the Bureau should, in my opinion, not be made too narrow, they should be somewhat elastic.

Commander Rasikotsicas (Greece). — The Greek Delegation regrets that it cannot agree with the proposal of the Representative of the Netherlands. In our opinion, the Bureau has, as its principal object, to obtain for the Hydrographic Offices of the States Members all which they may require to fulfil their task with reference to navigation. Now, in Greece, the Hydrographic Service has, as its principal object, the satisfaction of all the requirements of navigation and to provide everything which tends to make it easier and above all, safer.

We think that this goal does not differ from that of the International Hydrographic Bureau which, according to the Statutes (Art. 6, par. ii), should so act that, without exception, all information relative to the simplification and safety of navigation, should be collected and that units of measurement should be standardised. We believe, therefore, that the proposed definition does not fulfil these requirements for, by limiting the work of the Bureau, it will not include subjects which, in our opinion, should on the contrary be included in its activities. Hence we support the proposal of the Swedish Delegation according to which the work of the Bureau should not be limited.

Captain Schweppe (Germany). — I fully agree with Commodore Reinus.

M. Fichot (France). — It would be easy to reconcile the slightly differing points of view which have been expressed. I think that it is very difficult to define sharply the spheres of Hydrography and Navigation for there are points of overlap.

As concerns buoyage, which has been frequently mentioned, it is true that, in many countries and particularly in England and in France, different authorities deal with this subject. Nevertheless, these authorities agree amongst themselves; the French Buoyage Authorities make no changes in the buoyage of channels without consulting with the Hydrographic Office. A "Nautical Committee" is convened, in which the Hydrographic Office has an important position, and the decisions of the Buoyage Authorities are made only after consultation and agreement with all the authorities represented thereon.

Could it not be the same in the International Hydrographic Bureau? It is quite reasonable that a Director should undertake some definite work, as Admiral Niblack has done, but it seems necessary that the results of such work should be published only after agreement with other Organisations, such as those set up under the League of Nations, which deal with the same subject. The work done by each would be of use to both organisations but no final decisions would be made except in perfect agreement with the two.

Captain Bjørset (Norway). — I wish only to say, Mr. President, that I agree with Commodore Reinus. Even if not at present empowered by my Government to adopt proposals regarding special navigational matters, such as, for instance, special lighthouse matters, I always refer the proposals to the Institutes concerned which deal with them. There is always close collaboration in Norway between our Hydrographic Department and, for example, the Office of Buoys and Beacons. We work together. For instance, when we discover a pinnacle we immediately give information about this to the Office of Buoys and Beacons and soon after a buoy is placed on this pinnacle. I quite agree with the Delegate of the Netherlands that hydrographic work is the principal work, but it is also quite natural that we should do what we can to get proposals regarding navigational matters, buoys and beacons, and light-houses for instance, and get such proposals through. We have authority to help. Hydro-

graphic work is most important, but we try to get information relating to "aids to navigation" forwarded to the Institutes concerned.

The President. — The Chair finds it necessary to issue a correction or an addition to something stated. I have been reminded that there are two languages in this Conference and in the Bureau, one being English, the other being French. Being an American I used an Americanism in trying to distinguish between piloting a ship to and from a shore after sighting it and finding the position of that ship in the wide ocean with nothing in sight. I find that Captain Douglas "navigates a channel" which Captain Crosley calls "piloting". Therefore, in English, navigation is more associated with charts than I believed it to be.

Captain Douglas (Great Britain). — Mr. President, the whole way through this discussion, which we have been rather prolonging, we have been referring to navigational subjects, such as port signals, coastal signals, buoyage, etc.... The question as to whether the word "navigation" in English and "piloting" in the United States correspond does not arise in this connection. Therefore, although the President may be of opinion that navigation is very closely allied to hydrography the British Delegate still contends that these terms which we have been discussing, such as port signals, coastal signals, buoyage, storm warning signals, are not closely allied to hydrography.

The President. — The Chair believes that the discussions which have taken place have referred directly to that part of the Report of the Committee on the "Work of the Bureau" which begins with the words "Voting then took place", and ends, for the moment, with the words in the next paragraph "full session of the Conference".

"Voting then took place and it was particularly requested that mention should be made that a decision was reached by the majority and that the names of Delegations who voted should be recorded. The question for vote was "Should this work of the Bureau, *i. e.* that dealing with Navigational matters, be continued as future work of the Bureau". six Members of the Committee, including the Chairman, out of a total of sixteen were present and of the six the Delegates for France, Peru, Spain and United States of America voted in favour of continuing the work, whilst the Delegates for Great Britain and Netherlands voted against.

"It was particularly noted that in all probability other Members of the Committee, had they been able to be present, would have voted, and therefore the Chairman is strongly of opinion that a further vote, after discussion, should be taken at a full session of the Conference".

The Chair therefore suggests that this portion be considered now by the Conference.

Those words just indicated are followed by an expression of an opinion which has an agreement, an expression by one Delegate and an agreement by another.

"The Netherlands Delegate is of opinion and the Delegate for Great Britain is in agreement that the reasons against the continuation of work on subject other than purely hydrographical ones are:

- (1) Considerable waste of time and money.
 - (2) The impossibility of most Hydrographic Offices to do anything in the matter, and
 - (3) The danger of trespassing on the work of other organisations.
- and the wish was therefore expressed that it should be explicitly laid down in the Statutes what the work of the Bureau for the future is to be".

Unless there is objection the Chair will consider this as a Motion, it being stated in the early part, that action should be taken by the Conference. Expressing a wish to be corrected if wrong, the Chair considers this to be a Motion, that the future Work of the Bureau should be restricted. Therefore,

it has been moved and seconded, that the future Work of the Bureau should be restricted.

Captain Douglas (Great Britain). — Mr. President, the question for the vote which I suggested as Chairman of the Committee, and which is in the report which has been handed round to all Members, was "should this Work of the Bureau, *i. e.* that dealing with navigational matters, be continued as future Work of the Bureau". There is no question about restricting the work.

The President. — Then instead of what has been stated by the Chair the question is that in quotation marks, which comes next after that which has already been adopted: reading, "Should this Work of the Bureau, *i. e.* that dealing with navigational matters be continued as future Work of the Bureau". This, now, is the question which has been moved and seconded.

Admiral Niblack (Director of the I. B. H.). — Mr. President, the Motions are absolutely opposite; one is to restrict and the other is not to restrict the Work.

The President. — No, there is only one question. If work is not to be continued, then the work is restricted.

Captain Hooykaas (Netherlands). — Mr. President, is it necessary to vote on this question, after the words of Admiral Niblack, that such work is finished?

The President. — The Chair answers in the affirmative, because as was stated before by the Committee on Work of the Bureau, new things develop. The limitation imposed upon the Bureau would legally and strictly speaking prevent the Bureau from taking up such new things; I am not now referring to instruments.

M. Butavand (Monaco). — In order to do really useful work from the international point of view, we must look a little higher and we must try to avoid the personal side in discussions. Otherwise, the discussions are likely to become interminable.

I am not of the opinion that the Work of the Bureau should be limited. Its object is clearly defined in paragraph (ii) of Article 6 of the Statutes, which reads: — "The Bureau has as its object to co-ordinate the Hydrographic Work... with a view to rendering navigation easier and safer in all the seas of the world". In this connection, I am in entire agreement with the remarks made by the Delegations of Sweden, Norway and France. Nothing which might contribute to make navigation safer and easier throughout the world and which is connected with Hydrography can be considered as outside of the scope of the Work of the Bureau. I do not see the object of forbidding the Directors, whom we have appointed and in whom we have full confidence, to include in this scope anything which may be useful. Consequently, if the proposal which commences on page 4 with the words "considerable waste" and ends with the words "Work of the Bureau" were put to the vote I do not think that I would support it.

The President. — The question then is as existing between quotation marks. Delegates are cautioned that if they vote *yes*, no restriction follows; if they vote *no*, restriction does follow.

Are you ready for the question?

M. Fichot (France). — Could we not, before voting, adopt a motion setting out the essential work which the States Members of the Bureau desire to have included in the activities of the Bureau, but without making it compulsory for the Directors to keep solely to the subjects in this list. This would satisfy both the Delegation of the Netherlands and that of Sweden. Obviously, certain essential subjects lie more strictly within the sphere of hydrography, and others, while touching on hydrography, are connected with it in a subsidiary manner only, though they may be very useful nevertheless.

Captain Björset (Norway). — May I ask a question? I wish to know what is the meaning of the term "aids to navigation". Will you tell me if that means buoys and beacons only, or do you think it also means "aids" generally speaking that is to say that it comprises hydrography. There is a difference of opinion with respect to these words. Please explain this expression.

The President. — The Chair can only define that expression in his own language and understanding. An aid to navigation is a lighthouse, a buoy, a range, a beacon, a chart.

Captain Björset (Norway). — A chart?

The President. — A notice to mariners, a memorandum to mariners, a pilot chart, a coast pilot, or, what is called in some countries a pilot, in others sailing directions, a radiograph. A signal of any sort on shore or elsewhere which gives valuable information to any mariner is an "aid to navigation". If a mariner is told in one way or another by a signal in sight, or by radio message that a storm is coming it is an "aid to navigation" however received. He may receive it by a signal from another ship: he may receive it from a radio station on shore. He may receive it by light on shore. He may receive it by flags on shore. In general, any knowledge obtained by a navigator which tends to make his navigation safe, *tends* to make it safe, not necessarily *makes* it safe, is an "aid to navigation" in my understanding and language.

Captain Björset (Norway). — I thank you very much.

Admiral Niblack (Director of the I. H. B.). — It seems to me that the Conference would make progress of value to the Directing Committee if they were now to consult the Statutes Committee, or there may be something coming from the Statutes Committee on the subject.

They were not able to reach a decision, but it will be a question for that Committee also to define the powers of the Bureau.

The President. — The Chair is informed by its Secretary that the Committee on Statutes has not touched upon this matter. The question then is, shall the work be continued. Those in favour please indicate by raising their hands.

(A vote was taken, the result being that the Motion was carried).

The President. — This, in the opinion of the Chair, carries the report down to the paragraph beginning: "Other future Work of the Bureau..." and ending "...thus depriving the Committee of his valuable remarks".

"Other future work for the Bureau was then considered, and discussion took place with special reference to the publication dealing with Tidal matters which have been published by the Bureau. It was obvious that these expensive and voluminous publications had not been received with general approval by the various States and it was also obvious that the alleged mistakes and mis-statements in these publications could not be discussed by this Committee, the subject being outside their terms of reference. It was therefore approved generally that, whilst publication of Tidal research work should be continued by the Bureau, the lines on which the work be undertaken should be referred to the Tidal Committee. The Committee noted with regret the sudden indisposition of Admiral Phaff, which prevented his attendance, thus depriving the Committee of his valuable remarks".

The question is upon the adoption of this paragraph.

Captain Douglas (Great Britain). — As I dare say you will recollect, and as set forth in the paragraph, the subject was referred to the Tides Committee, and I understand that they have dealt with it, although I also understand that the report has not yet been circulated.

The **President**. — The acceptance of this paragraph by the Conference would, in my opinion, not affect any future decision made concerning Tides unless the Committee on Tides should decide, and it should be adopted, that further Tidal research should not continue. Is there any Member who can state whether or not the Tides Committee recommends future Tidal Work?

M. Fichot (France). — The Tides Committee finished its work this morning only. The report has been drawn up and can be distributed to the Members of the Committee to-morrow morning before the opening of the Plenary Session.

The Tides Committee did not specially examine the point in question as it had not been informed that it should do so, but the point appears in the general subjects dealt with by the Committee and I am sure that it cannot have occurred to any of the Members to forbid the continuation of Work on Tides. Besides, the Committee has laid down the lines which future work should follow.

The **President**. — Then the Chair suggests that, in order to get on, this paragraph be adopted with a universal mental reservation, if necessary, to change their minds if the report of the Tides Committee convinces them that they should do so. Are there any objections?

(Adopted).

Please consider the next paragraph beginning "The Committee then unanimously agreed..." and ending "of the various States Members".

"The Committee then unanimously agreed that the future work of the Bureau should include investigation into echo sounding, evolution of new hydrographic instruments, chronometers, and all other instruments in connection with actual hydrographic surveying, and so far as was in their power, the work of chart reproduction should be thoroughly investigated in all its branches, and information so obtained on all these subjects should be promulgated forthwith for the information of the various States Members".

Is there objection to the adoption of this paragraph?

(Adopted).

Now the next paragraph:

"Regarding the study of Oceanic Currents which was suggested by the Delegate for Peru, it was generally agreed that such study should be left to the various Hydrographic Offices who were at present actively pursuing these investigations; for it was considered that such investigation by the Bureau was beyond the capacities of the Staff".

Is there any objection to the adoption of this paragraph?

(Adopted).

The next paragraph which reads:

"The Committee particularly wishes to draw the attention at the full Conference to a request by the Delegate from China, which was submitted at the first Meeting of the 'Committee on Work of the Bureau', viz. 'In connection with the discussion on the Future Work of the Bureau, it is proposed that publications and circular letters for the more distant countries should be posted as early as possible by the Bureau, as on this occasion the Delegate from China had received the 'Proposals Made' only just before his departure from China, which did not allow him sufficient time for preparation'".

Is there any objection to the adoption of this paragraph?

Admiral Niblack (Director of the I. H. B.). — I can only say we will promise to do better.

The **President**. — That is not an objection.

Captain Fablet (Argentine). — The Argentine Delegation wishes to

announce that these publications reached it, also, very late. They arrived but six days before the Delegation left, namely on 10th September.

The President. — The Chair believes it should have included the last paragraph :

"The Chairman, whilst recognising the fact that this request may be considered to be outside the terms of reference of his Committee, begs to support the Chinese Delegates in this request, which, it was decided by the Committee, should be laid before the Full Conference for the necessary action".

With the one just mentioned. Is there any objection to the adoption of the two ?

(Adopted).

Captain Douglas (Great Britain). — Mr. President, before this Plenary Session adjourns, or ceases to exist at all, I should like to make a few remarks on the Work of the Bureau. I am very glad a decision has been arrived at, and that we have had such an interesting and instructive discussion, and one that has been so illuminating on the Work of the Bureau, because it makes quite clear to the British Delegation the decision and opinions of the Conference. This will be most helpful; for, referring to the President's request at the Plenary Session of the 2nd November for States Members to inform the Conference to what extent they could pledge their Governments to future commitments, the British Delegation is authorised to inform the Conference that, in the opinion of His Majesty's Government, the Work of the Bureau up to the present has not proved of as much value as was expected and they would not feel justified in continuing their contribution unless the activities of the Bureau in the future are to be of greater value than they have been in the past.

The British Delegation have accordingly been instructed to report on the programme of future Work, and, if in their opinion this is likely to be of real value to the science and practice of Hydrography, they have no doubt that Great Britain will continue her membership.

I think any Member of this Conference who knows the constitution of the British Admiralty and other Departments — and there must be those who do — will quite realise the position of the British Delegation.

The President. — The Chair believes the handicaps suffered by all Members — or nearly all Members of this Conference — are alike, and probably each one understands the situation of others.

It is now 5 o'clock. Selfishly, the Chair would like this Session to last another hour, particularly in view of the remarks made shortly after two o'clock. An expression of opinion from others would be appreciated.

Captain Schweppe (Germany). — Continue.

The President. — Are there any objections to continuing? Then we continue.

CHARGES FOR RADIO COMPASS BEARINGS

There was postponed at a previous session a proposal which was received by the Chair that the Bureau be instructed by the Conference to invite those States Members which now charge mariners for radio compass bearings, to discontinue such charge. The time for considering this question has now arrived as it concerns the future Work of the Bureau.

Believing that the wishes of those putting forward this proposal will be carried out, the Chair suggests that the proposal be slightly modified to read :

"The Bureau shall endeavour through Hydrographers to have these charges discontinued".

Captain Schweppe (Germany). — I agree.

The President. — Are you ready for this question ?

Captain Schweppe (Germany). — May I say a few words on this subject. Some radio bearings are most useful but at present very costly and during a talk I had with a captain of one of our merchant ships, he asked me whether it would not be possible to abolish this charge for radio bearings because he said they were so costly that they hesitated to make use of this service. I make this suggestion for the purpose of aiding navigators to obtain the advantage of this very useful instrument in locating their position at sea. I am of the opinion that the charge for radio bearings does not bring in any very great income to the States which ask for payment. I am quite sure that it is only necessary to give them the impulse and then radio bearings will be free.

The President. — Are there any other comments?

Captain Luymes (Netherlands). — I quite agree with Captain Schweppe. It would be a good thing if this charge were abolished, but that alone is not sufficient reason for us to meddle with it. In the English language there is a saying "mind your own business". I think we are in danger of forgetting our business by minding too much that of other people.

The President. — The Delegate from the United States seconded this proposal because he believed it would be a good thing for mariners if it could be accomplished. It is absolutely necessary that this Conference and the Bureau, in my opinion, should avoid political matters. I believe that the Bureau has the right and duty to correspond with Hydrographers upon matters the Bureau believes, or this Conference believes, to be of value to mariners. Speaking for myself, as the Hydrographer of the United States, I would use my own judgment when I received a letter from the Bureau as to whether or not I would attempt to do what was suggested or requested. I remain of the opinion that if this charge can be abolished, someone should take action. I know of no better agency than the International Hydrographic Bureau.

Commander Brandon (Great Britain). — Mr. President, I wish to express entire agreement with the words of the Netherlands Delegate, and should like to add that in so far as the British Hydrographic Department is concerned, it is only by strictly minding our own business that we can hope to do the work which is laid upon us as our special obligation.

The President. — Are there other comments? Are you ready for the question?

The question is: Shall this Conference instruct the International Hydrographic Bureau to endeavour, through the Hydrographers, to cause charges for radio compass bearings to be discontinued?

Those in favour please indicate by raising a hand.

The motion was carried (10 for, 7 against).

COLOURS OF HARBOUR LIGHTS *etc.*

(Withdrawal of proposal by Japan)

The President. — The Chair proposes to take up the proposal of Japan, *i. e.*, Colours of Harbour Lights on Breakwaters. This has been printed in "Special Publication No. 16", on the subject of Port Signals; page 19 in the English edition, and page 21 in the French.

It is stated: "There would seem to be no uniform system, but, in general, in Europe and Africa, the starboard hand light on entering is *green*, and the port hand *red*, (or very exceptionally *white*); whereas in Asia and the Western Hemisphere, the starboard hand is *red* and the port hand *green*, (or very exceptionally *white*). There would seem to be no very urgent reason for adopting a uniform system in this respect, nor to make harbour lights correspond with channel buoyage lights, since the height and intensity of harbour lights differentiates them from the buoy lights which are nearer the water".

I am informed that the Buoyage Committee of the League of Nations at its recent meeting in Stockholm did not consider it essential to have uniformity in this respect.

This concerns the future Work of the Bureau, and may properly be passed upon by this Conference.

Japan has made the proposal to the International Hydrographic Conference at Monaco, 1926, that international uniformity in the colouring of lights of breakwaters at entrances to ports shall be according to the Japanese system, *red* on the starboard hand entering, and *green* on the port hand.

The question is: Shall the Conference instruct the Bureau to make an effort through Hydrographers to reach uniformity in this respect.

Captain Hori (Japan). — As to the proposals of the Japanese Government contained in the document "Proposals made" (pages 46 to 48) which refer to buoyage, colours of lights on port jetties, general signals and port signals, the Japanese Delegation has no objection to accepting the opinion of the Bureau, namely not to open a discussion on these questions during this Conference.

The President. — The Japanese Delegate moves that all these proposals made by Japan be not acted upon by this Conference. Is there a second?

Captain Luymes (Netherlands). — I agree.

The President. — Unless there is any objection, the proposals made by Japan will not be considered by this Conference.

(No objection was made).

They shall not be considered by this Conference.

SUPPLEMENTARY CONFERENCE

The Chair has information that the Report of the Committee on Finance was distributed to Delegates this afternoon. Is there any objection to considering that report now? It is short.

Captain Douglas (Great Britain). — Mr. President, as Chairman of this Committee, I should like to draw attention to the last paragraph but one on page 1 of my résumé, *i. e.* paragraph 4. I there draw attention to the remarks of the expert of the League of Nations on the subject of financial control in connection with the Bureau. This letter unfortunately was not forthcoming, and I do not think any copies have been distributed. I understand from the Secretary that they are now being made.

The President. — That appears to prevent the consideration of this report at this time.

There has been distributed a proposal which reads as follows:

"The undersigned Delegates are of opinion that so many subjects have been laid before the present Conference that it has not been possible to examine them all fully.

"The undersigned therefore now propose, in conformity with Article 51 (a) of the Statutes, that a Supplementary Conference shall take place in the Spring of 1929, *i. e.* two and a half years after this present Conference, and they propose to remit to this Supplementary Conference the consideration of all questions which it has been impossible to discuss fully in the present one.

"They are of opinion that the Directing Committee should provide for the cost of such Conference by restricting expenditure in other directions".

(Signed) ODON DE BUEN

H. P. DOUGLAS

SCHWEPPE.

JUAN GERKEN.

The President. — The question is, shall this Conference recommend a Supplementary Conference in two and a half years. The adoption of such a Resolution carries with it all else there written. Are you ready for the question?

M. Fichot (France). — Could we not have the opinion of the Bureau as to the obligations which this proposal will entail?

Commander Spicer-Simson (Secretary to the Conference). — Speaking as the Secretary General of the Bureau, and of course, speaking only in that capacity, I think that the Bureau could probably stand the expense of a Supplementary Conference in 1929, seeing that during the first two years of its existence it was able to build up a considerable reserve. There is a point though, in connection with this, and that is that, owing to new Members having joined the Bureau and certain Members having claimed to own higher tonnage than was mentioned in the 1923 Statutes, the total amount of contributions received will be greater. The cost of this present Conference will absorb a certain amount, in fact I think nearly half of the Bureau's reserve. My personal opinion is that, probably, we shall be able to build up a sufficient reserve to meet a Supplementary Conference, provided that that Supplementary Conference does not last too long, but I judge from the proposal that it is intended to examine the questions very fully. This may mean, if questions are really going to be discussed very fully, a very prolonged Supplementary Conference. Therefore, I think it is only a question of — exactly as it is in this Conference — the loquacity of the Delegates.

The President. — It now appears that the best advice we have available indicates that there will funds available for this proposed meeting.

Commodore Reinius (Sweden). — I quite agree with this proposal, but I should like to add the following. The undersigned wish to indicate their opinion that it is desirable that if possible the Hydrographers and Assistant Hydrographers should attend the Conference. I think in that case the time of the Conference might be somewhat shortened, and in my opinion it is very useful that all Hydrographers should meet and become acquainted. I think five years is too long a time between these Meetings because there are so many changes in the Hydrographic Services, two and a half years would be much better.

The President. — Are there any objections to this addition?

Captain Schweppe (Germany). — I agree.

Captain Douglas (Great Britain). — No objection.

The President. — The question then is as previously stated, and in addition that Hydrographers and their Assistants should, if possible, attend. Are you ready for this question as it now stands?

Captain Luymes (Netherlands). — Mr. President, I propose to add that those questions could be included which may arise before the date of that Supplementary Conference. It should not be restricted simply to those questions which it has been impossible to discuss here.

Captain Schweppe (Germany). Captain Douglas (Great Britain) and M. Fichot (France). *agreed.*

The President. — The question to be considered is whether the proposed Supplementary Conference shall include those questions which it has been impossible to fully discuss here, and also those which may arise in the meantime. Is that right? Are you ready for the question?

(A vote was taken, and a Resolution was adopted in favour of holding a Supplementary Conference).

The President. — The attention of the Delegates is invited to the fact that to-day the Report and the Supplementary Report from the Statutes

Committee have been distributed at the opening of this meeting. Please consider these and be ready for their discussion at nine o'clock to-morrow morning.

Captain Schweppe (Germany). — May I ask if it is right that no work can be done on Thursday?

The President. — The Chair is informed by the Bureau that such is the case.

Captain Schweppe (Germany). — Then I think it is of the greatest importance that we finish on Wednesday, otherwise we should be obliged to remain here until Friday, and in fact could not very well get away until Saturday. I propose that we work to-morrow until we finish.

The President. — Unfortunately, all Reports have not been received yet, and some have had but little consideration.

The Chair is willing to work as long as any individual Member, and believes that the majority would like to finish as soon as possible.

The proposed work for to-morrow will be 9 a. m. Plenary Session, Report on Statutes. We will continue the Session to-morrow as long as the majority wish. The Reports on Finance and Tides can be acted upon to-morrow.

Unless there is objection this Session adjourns until 9 o'clock to-morrow morning.

The meeting rose at 1815.

CHAPTER VII.

The seventh Plenary Session was held on Tuesday, 9th November 1926, the Vice-President in the Chair.

The President. — The Session is open.

AMENDMENT TO MINUTES OF PREVIOUS MEETINGS.

The attention of the Chair has been called to an error in the minutes of the meeting of last Saturday when the new Directors were elected. On p. 13 of the English minutes where the Chair is quoted as announcing "The votes in order", the word "votes" should read "points". If there are no objections this change will be made. As Members are aware it is possible for a candidate to receive a larger number of votes than another and at the same time receive a smaller number of points, the first, second and third places on a ballot having different weights. There being no objections these changes will be made.

REPORT OF THE STATUTES COMMITTEE.

The President. — Attention is first invited to the Supplementary Report on the loose sheet. After the Session of last Saturday and after carefully reading the Full Report of the Statutes Committee the Chair believes the Supplementary Report to be no longer of value and therefore proposes that this be eliminated from the minutes. Are there any comments or objections?

Commander Brandon (Great Britain). — I should like a vote taken on the proposition which you have just put to the Conference.

Captain Schweppe (Germany). — I second Commander Brandon's motion.

The President. — It is moved and seconded that a vote be taken as to whether or not the paper under discussion and its contents shall be eliminated from the minutes.

The suggestion was made in the interests of saving time and it appears to the Chair that the question has already been definitely settled, as well as being fully and probably excellently covered in the Report of the Committee where appendices are suggested.

Commander Brandon (Great Britain). — May I say, Mr. President, that unfortunately I was not present at the meeting of the Statutes Committee when this resolution was adopted. No doubt the Chairman of the Statutes Committee could give the Conference the full reasons that led to its adoption, but, as I read it, it does not refer only to the tables which you have just mentioned, but refers to all the changes in the Statutes recommended by the Committee, the question being on what date these changes should take effect.

The President. — The Chair having failed in its effort to proceed more rapidly withdraws the suggestion and the Supplementary Report will be taken up in order.

Please consider the first part of the Statutes Committee Report.

Article 2 is replaced by the following :

"States which were Members of the Bureau at its creation in June 1921, those which have joined the Bureau subsequent to its establishment, and those

which have withdrawn their membership, are enumerated in Appendices A, B and C.

"These Appendices shall be kept up to date by the Secretary General".

Poland and Germany shall be inscribed in the Appendix as new Members, and Belgium as having withdrawn.

Article 2. (Adopted).

Article 3.

Article 3 is modified as follows :

(a) "Any other State, Member or ex-Member of the League of Nations, if it so desires, shall be admitted as a Member of the Bureau, on condition that it pays its proportional part in the assets of the Bureau, as given in the Balance Sheet of the Annual Report if it is admitted before July 1st, and in a balance sheet to be drawn up for July 1st if it is admitted after that date"

(b) "This proportional part will be calculated as follows :

"The total amount of the assets of the Bureau, multiplied by the number of votes allocated to the new State Member according to its tonnage, and divided by the total number of votes allocated to the aggregate States Members before the admission of the new Member".

(c) "The admission of States which are neither Members nor ex-Members of the League of Nations, will be decided by the vote of the Members of the Bureau, and not less than two-thirds of these must give their consent to such admission, which implies the financial obligation mentioned in Article 3 (b)".

Paragraphs (a), (b) and (c) of Article 3 are closely allied ; unless there is objection they will be considered together.

Captain Hori (Japan). — The Japanese Delegation ventures to make a short remark on the subject of the new wording of Article 3. It believes that the International Hydrographic Bureau could increase its activities and simplify its task by including among its Members the greatest possible number of States, which is obviously to the supreme advantage of the International Hydrographic Bureau.

The new wording of Article 3 stipulates that new Members shall pay a proportional part of the assets of the Bureau. The Japanese Delegation is not convinced that the insertion of such stipulation is benevolent towards new Members or to the advantage of the International Hydrographic Bureau.

Under these circumstances, the Japanese Delegation wishes the Conference to refuse this change in the Statutes. However, if the legal majority of the Conference upholds this wording, the Japanese Delegation, in a spirit of conciliation, will not insist on the point and will only request the President to be so kind as to cause this declaration to be inserted in the minutes.

Captain Schweppe (Germany). — I had the same hesitation as the Hon. Delegate for Japan about adopting this modification of Article 3 of the Statutes, but after having been informed by the Secretary General of the Bureau that the contributions to be paid by a State which joins after the modification of this Article will be small I withdraw my objection and recommend this proposal to the Conference.

The President. — The Chair is now informed by the Secretary General that these amounts are exceedingly small, no larger in some cases than 1200 gold francs, providing the reserve stays somewhere near its present value ; if we have many conferences it will decrease.

Is the motion of the Delegate from Japan seconded ?

The motion was not seconded.

Admiral Niblack (Director of the I. H. B.). — I know that the Statutes Committee has carefully considered all the points, but I would like to suggest that the words "ex-Member of the League of Nations" be struck out, because

it might be that under the Statutes of the League a country had been debarred or expelled from the League because of failure to comply with the terms which the League has drawn up and it puts that country (that has been excluded from the League for good reasons) in a more favourable position than some other country which had never joined the League. It seems to me that "ex-Member of the League" is somewhat of a complication. I merely suggest this, it is not important and may never come up, but I think it would strengthen the position of the League of Nations if we struck that out.

The President. — Are there any other comments?

Commander Brandon (Great Britain). — I beg to support the proposal of Admiral Niblack. That point was not discussed in the Statutes Committee. It did occur to me, and I could not see the reason for including "ex-Member"; but, in the interests of the principle already referred to, namely, economy of time, and assuming that the Bureau had some good reason for putting this in the Statutes originally, I did not raise the question. I certainly agree with what Admiral Niblack has said on the subject.

M. Butavand (Monaco). — I, also, support the proposal of Admiral Niblack and I propose the suppression, in paragraph (a), of the words "or ex-Member" (1st line) and to substitute for the words "which has never been" (1st line) the words "which is not".

Admiral Niblack (Director of the I. H. B.). — I understand Mr. President, that I have no right to make a motion. I merely make a suggestion that someone else may like to consider. My position is simply advisory.

The President. — Two Delegates have seconded these remarks.

The Chair suggests that, in addition, paragraph (c) will therefore have to be changed. It would then read "The admission of States which are not Members of the League of Nations".

Captain Schweppe (Germany). — It appears to me impossible to change Article 3 in this way. According to this new wording, a State which voluntarily leaves the League of Nations would have to renew its request for membership of the International Hydrographic Bureau, even though it is a Member.

M. Fichot (France). — I do not think that such interpretation could be given to Article 3 thus modified. A State which voluntarily leaves the League of Nations remains, nevertheless, a Member of the International Hydrographic Bureau; it would not have to renew its request for admission. Nothing in the Statutes authorises the belief that a State which leaves the League of Nations must, at the same time, leave the International Hydrographic Bureau.

Captain Schweppe (Germany). — I accept this interpretation.

Captain Bjørset (Norway). — It seems to me that this question should not be discussed to this extent, as it is only of little interest. However. I quite agree with Admiral Niblack.

The President. — The Chair believes that in the proposal suggested for adoption there is no handicap imposed on any nation whether or not, once, now or never connected with the League of Nations.

(A vote was then taken).

Article 3 was adopted as amended.

Article 4 (b) :

"Any State Member which does not pay the full contribution due shall be given two years in which to make good the deficit, beginning with the notice given by the Directing Committee".

(Adopted).

Article 5.

Replace 5 by 5 (a).

Insert 5 (b) :

" If the accounts with the Bureau are not settled before the withdrawal is notified, it shall be expelled from membership ".

The Secretary General. — Speaking as a Member of the Bureau, I should like to make a suggestion for the consideration of the Conference and that is, that if this question of the expelling of a Member for non-payment is passed, we would be confronted by a certain difficulty in the Bureau supposing that the expelled State remains a Member of the League of Nations. According to Article 3 paragraph (a), which you have just adopted, if in about four years' time that expelled State, without having paid all its contributions, applies to re-enter the Bureau, we would have to accept it on account of its being a Member of the League of Nations. I think some provision should be added as to action with reference to expelled States.

The President. — The Chair suggests that the words " and may not rejoin " will cover that suggestion.

Captain Luymes (Netherlands). — I agree with the suggestion made by the Secretary General, but there is a difficulty which we do not appear to have thought about. I think we ought to be careful to avoid speaking of expelling a State, which seems to me to be a little too strong. I propose therefore that the paragraph should be modified as follows : — " If accounts of the Bureau have not been settled before the withdrawal is notified, no new membership can be obtained before this is done ".

The President. — It is proposed to strike out the words " shall be expelled from membership ", and replace them with " that State may not again become a member of the Bureau before the account has been settled to the satisfaction of the Bureau ". Is that correct ?

Captain Luymes (Netherlands). — Certainly.

M. Butavand (Monaco). — I agree with the general tenor of the change suggested, which is correct. I agree also with my Colleague of the Netherlands that the expression " expelled " is somewhat strong and that it would be better to avoid it. But I call your attention to the following point.

We have Article 5 which throws open a door to the Members of the League of Nations. If, later on, we make a condition which is in opposition to this, it must be explicitly stated that a Member cannot avail itself of Article 3 paragraph (a), if a Member of the League of Nations.

I therefore propose the following text :

" If the Member has not met its financial obligations before notifying its withdrawal, it shall be definitely crossed off the list of Members and it cannot avail itself of Article 3 paragraph (a) even though it be a Member of the League of Nations ".

The Secretary General — I would direct M. Butavand's attention to the fact that a State cannot be " definitely crossed off " if under certain conditions, it can request to be admitted again as a Member of the International Hydrographic Bureau.

M. Butavand (Monaco). — I had not considered the case of readmission when Members have met their financial obligations. The remark of the Secretary General is very correct and, consequently, I propose that the word " definitely " be suppressed from the text which I suggested.

Admiral Niblack (Director of the I. H. B.). — It seems to me that the proposal made by M. Butavand will meet exactly the new requirements which the striking out of the term in the paragraph involves.

The President. — The Chair now understand this paragraph to read : " If the accounts with the Bureau are not settled before the withdrawal is notified, that States shall be crossed off the list of Members of the Bureau and may not again become a Member until the account has been settled in accord-

ance with the Statutes of the Bureau, even though a Member of the League of Nations”.

Are there any objections to the adoption of this paragraph as it now reads?
(*Adopted*).

Article 22. — Please consider the first quotation:

“ Their order of precedence and the mode of their election are regulated by Article 59 and 60”. Are there objections to the adoption of this?

(*Adopted*).

Take the next paragraph: — “ The words “ at least two of them ” of Article 22 (*ii*) are suppressed ”. Are there objections to the adoption of this paragraph?

M. Butavand (Monaco). — At the beginning it is stipulated that “ these three Directors shall be of different nationality ”. This wording might lead (in French) to ambiguity, for it might allow, for example, two Directors to be of the same nationality. What is really intended is that all three shall be of different nationalities. Therefore I propose the following wording: “ No two Directors may be of the same nationality ”.

The Secretary General. — Would M. Butavand accept this formula.

“ These three Directors must be of three different nationalities ”?

or perhaps:

“ All three Directors must be of different nationalities ”.

M. Butavand (Monaco). — The following sentence seems to me to be even simpler:

“ These three Directors must be of three different nationalities ”.

The Secretary General. — That is the first of my two proposed wordings.

The President. — The Chair therefore decides that the English reading being perfectly clear, it shall be translated with equal clarity into French, and believes that those entrusted with that duty will do it satisfactorily.

Commodore Reinius (Sweden). — The Swedish proposal regarding Article 22 (*ii*) was not approved by the Statutes Committee. As we have no time to lose, I will not raise a discussion here, but as this question, in my opinion is of great importance, the Swedish Delegation will enter a reservation as to Article 22 (*ii*).

The Chairman. — Are there objections to the adoption of the change as stated?

(*Adopted*).

The next paragraph of the report deletes paragraph (*iii*) of Article 22.

(*Adopted*).

The following paragraphs are added to Article 22.

Paragraph (v):

(*v*) “ A Director, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be a Member of the Directing Committee ”.

(*Adopted*).

Paragraph (vi):

(*vi*) “ In every three years of service, each Director is entitled to two months’ leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him ”.

(*Adopted*).

Article 26:

Add to Article 26:

“ If only two Directors attend a Committee meeting and a decision cannot

be postponed to a full meeting, the vote of the President or of the Acting President shall be preponderant”.

(Adopted).

Article 29 (e) :

“The Secretary General, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be Secretary General.”

(Adopted).

The Secretary General. — There is a typists error in the first line of the French text of this paragraph; it should read: — “...une durée totale de douze mois *non* consécutifs”.

The President. — There being no objections, that correction will be made. Are there objections to the adoption of paragraph (f) ?

“In every three years of service, the Secretary General is entitled to two months’ leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him”.

(Adopted).

Article 31.

This is a replacement. Are there objections to the following: — “He may be nominated as a candidate for the post of Secretary General at the next election” ?

Captain Schweppe (Germany). — There is a discrepancy between the French and English texts. The French text reads “aux élections” while the English reads “the election”. It would be better to make the two texts harmonise.

Captain Brandon (Great Britain). — May I suggest, in the interests of saving time, that this small point be left to the Secretariat to settle in accordance with the best advice obtainable in both languages.

The President. — An excellent suggestion which is adopted after the Chair has had the best advice available for the moment. It appears to be merely a matter of translation, the English text being clear, the translation will presumably be made satisfactorily.

Are there further objections ?

(Adopted).

Article 33.

This, of course, amounts to a change throughout the Statutes when applied. It begins with this particular one because the unit is here first mentioned.

The paragraph then to be considered is “Replace, in Article 33 and in all the other articles in which they appear, the words “Swiss francs” by “gold francs”.

Are there objections to the adoption of this paragraph ?

The Secretary General. — With the permission of the Conference, I should like to say that, in my personal opinion, the last line of this proposal should read: “Substitute ‘Swiss francs gold’ by ‘gold francs’.” For this reason, though we sent out a Circular-Letter suggesting that the word “gold” should be suppressed, it was never definitely done because we did not get a sufficient majority according to Article 64 of the Statutes. I think therefore that in the text, and merely to regularize the proceeding, we should say “Replace, in Article 33 and in all the other Articles in which they appear, the words: ‘Swiss francs gold’ by ‘gold francs’.”

The President. — From information just obtained, I understand that there is more than one gold franc, and it will be necessary to fully explain which gold franc is intended. The Chair takes the liberty of suggesting, with

the information it has, that an addition be made of "gold francs as adopted by the League of Nations".

M. Fichot (France). — This is an absolute financial heresy. There are not several gold francs, but only one. However, I agree to the proposal to insert: "as adopted by the League of Nations".

Commander Brandon (Great Britain). — I quite understood from the special Representative of the League of Nations that the term "gold francs" was open to no ambiguity whatever, and, in the absence of further direct information from a representative of the League of Nations, I propose that the text should stand as we have it.

M. Butavand (Monaco). — I suggest that the words "gold franc" only be used. In point of fact the gold franc is clearly defined. One kilogram of gold 90 % fine is worth 3,600 francs.

The President. — The first question is on the replacement of the phrase "Swiss francs gold" by "gold francs". Is there any new objection to the adoption of this as it stands?

(Adopted).

The next paragraph of Article 33 reads:

"This modification will take effect from 1st January 1927".

(Adopted).

Article 34 (b)

Article 34 (b) is modified as follows:

"The tonnages taken for the purpose of determining the contributions of the States Members are given in Appendix D, which is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Article 61 (b) and 64)".

(Adopted).

Article 35.

Article 35 is replaced by the following:

35 (a) "The scale given in Article 34 (a) (iii) determines also the number of votes allocated to each Member in the elections for the Directors and Secretary General (see Articles 59 and 60). The number of votes is the same as the number of shares. The Table which shows the shares, votes and contributions of the States Members is contained in Appendix E and is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Article 61 (b) and 64)".

35 (b) "The principality of Monaco is treated on a special basis. To it are allotted two votes and its annual contributions is fixed at 6,000 French Francs paper".

Consider first Article 35 (a).

(Adopted).

Article 35 (b).

(Adopted).

Article 36.

In line 3 of this Article for "the tonnages and consequently the Table of Contributions and votes" read "Appendices D and E".

This being a necessary correction to follow what has gone before, should be adopted. Are there any objections?

(Adopted).

Article 37.

It is proposed to cancel the present Article 37 and to substitute:

"37. — To become effective in the election for the Directors and Secretary General, alterations which Members consider should be made in Appendices D and E must reach the Directing Committee at least ten days before the opening date of a Conference. Such alterations will be submitted to the

Conference for approval at the first Plenary Session. In the case of a bye-election, any alterations proposed must reach the Bureau not later than the latest date fixed for the receipt of the lists of candidates."

(Adopted).

Please make the following correction in Appendix D: tonnage for Japan, to read: 4.670.048 tons.

This makes no change in Appendix E.

The idea of the Appendix has been already adopted. Unless there is comment or objection, these will be accepted as submitted.

(Adopted)

Article 43 (b):

The words "French francs paper" are replaced by "gold francs".

(Adopted).

New Article 45 in 3 parts.

Article 45 (a): In the month of January of each year, or when the Auditor of the League of Nations has made his Report, the Bureau will publish an Annual Report on its work and finance.

(Adopted).

Article 45 (b): A list of the official Representatives of the Members and their respective addresses shall be included in the Annual Report.

(Adopted).

Article 45 (c): The Directing Committee shall draw up and publish annually during the month of September, estimates of receipts and expenditure for the following year, with all necessary explanations.

(Adopted).

Article 48.

To be suppressed.

(Adopted).

Article 49 becomes Article 48, and Article 50 becomes Article 49.

(Adopted).

Please consider in Article 50 the paragraph: "insert between 'Bureau' and 'Directing Committee' the words: 'representatives of the League of Nations in a consultative capacity'".

The Secretary has pointed out to me that the insertion of the words as recommended appears to be difficult. If there are no objections, the idea being fully expressed, the insertion will be made by the Secretary.

The Secretary General. — The difficulty is with Article 50, which is to become Article 49. I raised the question because I did not see how it was possible to put this insertion between the words "Bureau" and "Directing Committee", because after the word "Bureau", the Directing Committee is not mentioned. It is only a question as to where it should be inserted. I suggest that it is intended that this insertion should go in between the words "Members" and the words "and the". It would thus read:

"The Delegates of the Members, Representatives of the League of Nations in a consultative capacity, and the Directing Committee and Secretary General etc..."

The President. — The meaning as now explained is perfectly clear in English. If there are no objections, it will be adopted.

(Adopted).

Article 51 becomes Article 50; a necessary change to follow what has been adopted.

(Adopted).

Article 51 (new).

"The languages used at the Conferences shall be English and French".

(Adopted).

Article 55 (a)

Article 55 (a) is modified as follows :

" Periodic Conferences will specially examine the reports of the Bureau as to its work and its finances since the last Conference. For this purpose, in their early stages, small Committees will be nominated, the conclusions of which will be submitted to a Plenary Session of the Conference ".

(*Adopted*).

Article 56 (a) is modified as follows :

The last sentence in Article 56 (a) : " This shall be despatched " etc... is suppressed and replaced by :

" This shall be despatched, together with the report on the Work of the Bureau and its finances since the last Conferences mentioned in Article 56 (a), to the Members six months before the proposed date of Meeting ".

(*Adopted*).

Article 56 (b).

Article 56 (b) is modified as follows :

" No subject, which is not included in the final schedule shall, be discussed unless it is proposed by at least three of the Delegations of the Members ; the President of the Conference must be notified in writing of the intention to introduce such subject not less than 24 hours beforehand ".

(*Adopted*).

Article 58 (c).

The last line is modified as follows :

" Case of the elections referred to in Article 59 (ix) ".

(*Adopted*).

Article 59 (iv).

Article 59 (iv) is modified as follows :

" The Bureau will then collate the lists sent by the States Members and present them to each Delegation at the opening of the Conference, with copies of the notes referred to in (ii) ".

(*Adopted*).

Article 59 (vii).

The last sentence is modified as follows :

" The principles of Article 58 (a) and (b) will apply ".

(*Adopted*).

Article 65.

The last sentence is modified as follows :

" Should any divergence be found in the meaning of the two texts, the Directing Committee will decide on the precise interpretation ".

Mr. Richards (Egypt). — I should like to propose that this be slightly modified to read : " Should any divergence be found in the meaning of the two texts, or should there be any doubt as to the exact meaning of the Statutes, the Directing Committee will decide on the precise interpretation ".

The President. — It is moved that an addition be made which will require the Directing Committee at all times to give an interpretation — a decision — as to what the language actually means. Is there a second ?

Captain Fablet (Argentine). — I second it.

The President. — It is moved and seconded that this part of the Report be modified as indicated, and adopted. Are there any comments ?

Commander Brandon (Great Britain). — Mr. President, the British Delegation would prefer that this addition should not be made. It is rather a controversial matter. We hope that the Statutes are reasonably clear, but this Conference has shown that different ideas are possible as to the meaning of them, and I think that if the question is at all important it ought to be

referred to the States Members, by letter should it require an immediate decision, or be placed before the next Conference if it can wait till that date. I beg therefore to oppose this motion.

The President. — It is obvious that at a Conference reasonable doubt must arise as to the exact meaning — whether in French or in English — of requirements in the Statutes. It appears to the Chair that there should be a final decision possible at all times, naturally if a Conference is not in session and doubt arises, the Directing Committee may readily obtain opinions and a decision from States Members. That is not practicable or even possible during a Conference. The Chair is of the opinion that a decisive answer should be available. It remains to determine from what source it shall be obtained.

The Chair further suggests that Article 61 (*d*), to which the Chair has referred before, possibly covers the proposed change.

Commander Brandon (Great Britain). — The British Delegation, Mr. President, is entirely in agreement with your views regarding the application of Art. 61 (*d*) under these circumstances.

Mr. Richards (Egypt). — I agree. I agree to withdraw my motion if that is understood.

The President. — The motion is withdrawn. The question is on the adoption of the text as it stands:

“Should any divergence be found in the meaning of the two texts, the Directing Committee will decide on the precise interpretation”.

Any objections ?

(*Adopted*).

Please consider Paragraphs under Heading II “Other Questions submitted to the Statutes Committee”:

“The Committee having discussed the Netherlands' proposal, expresses the wish that the Bureau should study the publications and charts of States Members, correspond with those States Members which have not carried out the resolutions of the Conference, in order to know their reasons, and classify the replies so that they may be discussed at the next Conference”.

Captain Hori (Japan). — When any resolution has been made by this Conference, it is so made mainly for technical consideration and the Representatives of each State will be fully desirous of seeing it put into execution by the competent authorities of their country. If a State does not do so, it will frequently be for some serious reason, either financial or political, if not for a technical reason. If the Bureau is to be obliged to ask of States their reasons of this sort, with the object of collating the answers for discussion by the next Conference, it is feared that a more or less serious misunderstanding between these States and the Bureau might arise, whereas we have high hopes for the future of the Bureau.

The Japanese Delegation, having closely studied the text and after serious consideration, declares that it is unable to accept this resolution and it desires that this declaration should appear very clearly in the Report of the Proceedings of the Conference.

The President. — The Delegate from the United States quite agrees with the Delegate from Japan. This as written authorises and directs the Directing Committee to hand out what reads a little like a threat, not wholly, but somewhat. Are there any other comments ?

Mr. Richards (Egypt). — Mr. President, Article 6 (*iii*) of the Statutes says that one of the objects of the Bureau is:

“to cause the Hydrographic Offices to adopt the resolutions made by the International Hydrographic Conferences”.

That seems to cover the case, but it does not give any powers or describe any machinery for getting this Resolution carried out.

Captain Luymes (Netherlands). — Mr. President, I beg to say that no doubt exists as to the goodwill of the States Members. It was after a discussion in the Committee on Statutes regarding Article 6 (*iii*) that this Motion was carried in that Committee. The meaning is that material shall be collected by the Directing Committee regarding the extent of execution of the Resolutions adopted by the Members. The request for reasons is only suggested with a view to enable the Directing Committee to prepare material to be put before the next Conference, so that we might then be in a position to consider whether the accepted symbols, abbreviations, *etc.*, are perhaps not practical and should be changed. My idea was that the Directing Committee should become active in that sense, not that they should control: merely collect information and reasons why the Resolutions had not been carried out so as to submit information to the next Conference.

Admiral Niblack (Director of the I. H. B.). — Mr. Chairman, I do not know what discussion took place in the Committee, but the proposal of the Bureau to amend Article 6 (*iii*) suggested that the word "cause" should be changed into "urge". It would appear that having refused to accept the word "urge" it passes on to the next Conference the duty of really doing the "causing". If the Statute is left in its present form as is proposed, that is to say: "to cause the Hydrographic Offices" — then I think it would be best to leave the Bureau to interpret the word cause to the best of its ability and without the rather unsatisfactory method proposed here.

The Directing Committee, if it is to cause the Hydrographic Offices to do things, should not, in my opinion, be told how to "cause" it. If the suggestion of the Committee is not adopted to use the word "urge", then it does not seem to me that the Conference should prescribe the method by which this should be caused to be done. It should be left to the Committee.

Captain Schweppe (Germany). — This matter having been discussed very thoroughly in the Committee of Statutes, I recommend the adoption of our proposition.

Captain Bjørset (Norway). — We have discussed and examined these words very closely, and the result was that there was not very much difference, because the Bureau has as its object "to cause", and if the Bureau has as its object "to cause", we did not find much difference between this expression and the Bureau's expression "to urge"; it is only an object of the Bureau, and we discussed and examined it and finally came unanimously to the decision that the word "cause" should stand.

Commander Brandon (Great Britain). — Mr President, on behalf of the British Delegation I beg to support the Motion of the Hon. Delegate for Germany, but would suggest that if it would in any way meet the objections of the Hon. Delegates for Japan and the United States to strike out the words "in order to know their reasons" and if that were accepted by the other Members of the Statutes Committee, I would suggest that we adopt it as a compromise.

The President. — Do you accept that, Captain Schweppe?

Captain Schweppe (Germany). — Yes, I do.

The President. — It has then been moved and seconded that this paragraph as submitted be changed by removing the words "in order to know their reasons", and as modified be adopted. Are you ready for the question?

Captain Hori (Japan). — I regret that I cannot accept the resolution thus amended.

M. Butavand (Monaco). — Even as modified the motion put forward does not add much to Article 6, paragraph (*iii*). Consequently, seeing that this Article 6 paragraph (*iii*) has been closely studied, the better way would be to keep to it purely and simply.

Captain Luymes (Netherlands). — Mr. President, of course Article 6 (iii) is not changed. The motion is intended only as an expression of opinion by the Conference, that in the foregoing period the Bureau has not paid attention to Article 6 (iii) and that this is not in accordance with the wishes of the Conference. According to my opinion, the work of the Bureau must be active instead of passive. "Urging" means more than waiting for information. The charts received by the Bureau ought to be studied and aberrations from the London and the Monaco rules should lead to correspondence with the States concerned. Through this correspondence attempts should be made to remove the aberrations or to know the reasons for maintaining them, which reasons will eventually form material for proposals at the next Conference.

These are the reasons that have led me to propose the Motion to the Committee on Statutes, and I hope the Conference will consider it reasonable to accept it.

The President. — Are you ready for the question? The question is: shall this paragraph as written, less those words previously read, be adopted? Those in favour of this Motion please indicate by raising a hand.

Those opposed?

It is a tie vote. Another vote will be taken on this later in the Conference.

The Chair is reminded of something that it had forgotten: that it is entitled to two votes, but the Chair is not going to take advantage of it. This question is postponed.

Please consider the paragraph under "The Committee adopted the British Proposal that it would be of great assistance if the various States Members of the Bureau could, during the Conference, be impressed with the desirability of despatching new editions of charts and navigational books as soon as possible after publication".

Are there any comments or objections to the adoption of this Resolution?
(Adopted).

PROPOSAL FOR THE REDUCTION OF CONTRIBUTIONS.

Please read the first paragraph following on the words:

"Concerning the reduction of contributions, the Committee adopts the following Resolution:

"After careful consideration and consultation with the Finance Committee the Statutes Committee are inclined to the view that it should be possible to effect reduction in the scale of contributions of the States Members without impairing the efficiency of the Bureau. As, however, the existing uncertainty as to the future movements of the French franc renders it impossible to form a reliable estimate of the relation between receipts and expenditure during the next five years, the Committee do not wish to alter the Statutes at the present time. But they consider that the new Directing Committee should thoroughly explore the financial situation of the Bureau, obtaining, if necessary, expert assistance from one or more of the States Members, and at the end of a year should render a full report on the matter to all the States Members, indicating in particular, what economies have been or can be effected.

The Secretary General has just suggested that a very slight modification of this as it exists would materially assist the Bureau if instead of the words "at the end of a year" could be substituted "in December 1927" or better still "at the end of the next financial year".

Are there objections to this small change? This change now makes the sense of the Resolution to mean that the report shall be made at a routine period which happens to be in about a year.

Are there objections ?

(*Adopted*).

Paragraph 2.

"The Committee rejects the reduction of Directors' salaries proposed by Admiral Phaff".

Are there objections to the adoption of this ?

(*Adopted*).

Paragraph 3.

This paragraph contains two suggestions. Please consider the first :

"The Committee rejects the suppression of the Secretary General".

Is there any objection to the adoption of this ?

(*Adopted*).

Please consider the second paragraph :

"The Directing Committee to be elected ought to consider as its first and principal duty to be fulfilled as soon as possible, the formation by it of an internal organisation of the Bureau and of rules which guarantee that the very considerable credits entrusted to the Bureau by the Conference, shall be employed as effectively as possible in the carrying out of the Work of the Bureau as ordained by the Statutes.

"These new rules should be communicated to the States Members immediately upon their adoption".

The Chair requests information from the Chairman of the Statutes Committee. Was the first line in this paragraph intended as a permanent proposition, or to apply to the election which has now ceased ? The words "to be" could be changed easily if the meaning is that the Directing Committee for the next five years is concerned. The Chair suggests that the word "recently" or "just" might replace the words "to be", if that is the meaning.

(The Chairman of the Statutes Committee made no reply.)

Commander Brandon (Great Britain). — That was most certainly the intention of the Committee, Mr. President. At the time when this Resolution was adopted, we did not contemplate that the election would be held until after the consideration of all our Recommendations.

The President. — Is there objection to the insertion of the word "recently" instead of the words "to be" ?

The change will be made.

Is there objection to the adoption of the paragraph as it now reads ?

(*Adopted*).

Please consider the Proposals which have been rejected by the Committee.

Admiral Niblack (Director of the I. H. B.). — I think that 46 (b) should be 45 (b) in the English text.

The President. — The Chair believes the suggestion to be in accordance with the facts. There was a Proposal to change 45 (b).

Admiral Niblack (Director of the I. H. B.). — The error may be in the book "Proposals Made".

M. Albert (Assistant Secretary I. H. B.). — It was 46 (b). The book is right.

The President. — Modification of Art. 6 (iii) :

Proposal of the Bureau. Please remember that all of these are recommended for rejection. Is there objection to the acceptance by the Conference of the rejection ?

(*Rejected*).

Article 9 (a) : *Rejected.*

" 10 (d) : *Rejected.*

" 22 (i) : *Rejected.*

" 22 (ii) : Any objection ?

Commodore Reinius (Sweden). — I refer to my reservation.

The President. — *Rejected* by the Conference with the insertion in the Minutes of the reservation by Sweden.

Article 23 :	<i>Rejected.</i>
" 28 :	<i>Rejected.</i>
" 46 (b) :	<i>Rejected.</i>
" 57 (a) and (b) :	Any objections ? <i>Rejected.</i>
" 57 (a) and (b) :	<i>Rejected.</i>
" 59 (iv) :	<i>Rejected.</i>
" 59 (vii) :	<i>Rejected.</i>
" 59 (viii) :	<i>Rejected.</i>
" 60 (i) :	<i>Rejected.</i>
" 60 (iv) :	<i>Rejected.</i>
" 60 (v) and (vi) :	<i>Rejected.</i>

The Conference is requested to note the last paragraph on that page: (" The Swedish proposal relative to Article 59 (iv) was withdrawn by Commodore Reinius in the course of discussion ").

The Recess will be taken until 1415, it having been expressed that 1400 is too early to start again.

The Meeting adjourned for lunch at 1215.

On resuming.

SUPPLEMENTARY REPORT OF THE STATUTES COMMITTEE

The President. — In continuation of the Report of the Statutes Committee, please consider the supplement to that Report.

The last part of that Report contains a Committee resolution suggested for adoption by this Conference. As this matter appertains to a decision which, in the opinion of the Chair, can only be reached by the consent of the Governments of States Members it can be of no value here unless voting Delegates state whether or not their votes bind their Governments. It requires a two-thirds vote of States Members to adopt this Resolution. Delegates are requested to answer " Yes " or " No ", meaning: " This binds my country " or " This does not bind my country ".

Argentina.....	Yes.
Brazil.....	Yes.
Great Britain.....	Yes.
(Chilian Delegates not present).	
China.....	Yes.
Denmark.....	Yes.
Egypt.....	No, for example I cannot bind my country to accept an increase of contribution.
France	Yes.
Germany	Yes.
Greece	No.
(Italian Delegate not present).	
Japan.....	Yes.
(Monaco Delegate not present).	
Netherlands.....	Yes.
Norway	Yes.
Peru	Yes.
(Polish Delegate not present).	
Portugal	No.
Spain.....	No.
(Swedish Delegate not present).	
United States of America.....	No.

The President. — These statements will be considered when the vote is taken.

Commander Brandon (Great Britain). — Mr. President, in view of the statement of the Hon. Delegate for Egypt, it seems to me that there may be some misunderstanding about this matter in the minds of some of the Delegates. I explained in the Statutes Committee on behalf of the British Delegation that, before we left England, we had before us the various proposals that were made by the Bureau and by States Members and we decided on what we could do with regard to these proposals. Where the Hydrographic Department itself was not competent to decide on behalf of the British Government, it sought the opinion of the proper Department. Therefore, we were prepared to deal with all those proposals, and the Report of the Statutes Committee, except in very minor details, does not go outside them. Thus, so far as this particular resolution is concerned, the Delegation of the British Empire is empowered to accept the changes recommended by the Statutes Committee and now accepted by the full Conference.

As regards the question of increased contributions, that so far as I know, was never raised. There was a question of *decreased* contributions, which the British Empire, as, I imagine, most other States, would have been very glad to accept if it had been thought possible to bring it in.

M. Fichot (France). — France will certainly pay what is due from her, since she voted in favour.

Captain Schweppe (Germany). — I am in entire agreement with the Hon. Delegate of Great Britain. The proposals should, I believe, be despatched to the States Members six months before the Conference, in order that the Delegates should have time to study the questions submitted.

Mr. Richards (Egypt). — With regard to my status, as Member of the Egyptian Delegation, I have no power to bind the Egyptian Government, in any way whatever. I am not a Minister Plenipotentiary, I am a Delegate to this Conference, but in my opinion, there is no doubt whatever that the Resolutions which have been adopted by this Conference altering the Statutes will be accepted without reservation by the Egyptian Government.

Admiral Niblack (Director of the I. H. B.). — Mr. President, the Directing Committee has always deemed it necessary for two-thirds of the Governments to express in some definite official form their approval of the Statutes or of changes in the Statutes. It is therefore necessary that two-thirds of the States Members pledge their Governments to approve this draft resolution. If they do so there will be nothing else for the other third to do but to accept it as adopted from that moment. The question which the poll is to determine is whether the necessary two-thirds Members voting have the required authorisation from their Government; if so, the moment this Resolution is passed by a two-thirds majority, it will come automatically into force.

The President. — Without attempting to lead the Members into intricacies of the Government of the country I represent, I will merely call attention to the fact that there has been an election since I left.

The Chair takes the liberty of suggesting that the words contained in the parentheses no longer apply and that they might be removed. If there are no objections to this removal it will be done.

Commander Brandon (Great Britain). — In the same way, Mr. President, if we are going to bring this resolution up to fate, I would suggest that we should say, after "Committee" in the second line, "and adopted by the Conference", instead of "which may be adopted".

The President. — It is suggested that the Conference should not adopt as its own resolution the wording herein expressed, and further that if this is adopted as it stands as a principle, the Secretary might very properly put it

into the language intended. If that procedure is not agreed upon, the Chair thinks this should be rewritten as a Conference Resolution. If there are no objections, the Secretary General will now read the wording suggested by him.

The Secretary General. — "The Conference is of opinion that all the changes in the Statutes recommended by the Statutes Committee and adopted by the Conference shall take effect as from the moment at which they are adopted, with the exception of the introduction of the gold franc, regarding which a special recommendation has been made". This is but a very slight paraphrase of the original.

Commander Brandon (Great Britain). — I am very sorry to take the time of the Conference again — it is purely a matter of drafting. There was one small alteration which was voted this morning, which had not been recommended by the Statutes Committee. It might be simpler to say "The Conference is of opinion that all the changes adopted to-day by the Conference..." or words to that effect.

I was referring in particular to the alteration which was made on the initiative of Admiral Niblack in regard to an ex-Member of the League of Nations, which was entirely fresh and not discussed by the Statutes Committee. It is only a minor detail, but it might be as well to have it quite right.

The President. — Would it not be as well to leave "by this Conference" instead of limiting it to what was adopted on a certain day?

The Secretary General will read another draft of the wording.

The Secretary General. — "The Conference decides that all changes in the Statutes adopted by the Conference shall take effect immediately, with the exception of the introduction of the gold franc, regarding which a special recommendation has been made".

The President. — Is there doubt in anyone's mind about the present construction of the Resolution which is proposed?

There being no doubt, the question is: shall this Conference decide that changes in Statutes effected by it should come into effect immediately, the exception noted being understood. Are you ready for the question?

(A vote was taken).

(Adopted).

The President. — The **Delegate of the United States** regrets the necessity of informing the Conference that this does not bind the United States in any way.

CARRYING OUT OF RESOLUTIONS BY STATES MEMBERS.

The question on the proposition of the Hon. Delegate of the Netherlands in connection with correspondence of the Bureau with States Members on the carrying out of the Resolutions adopted by this Conference was postponed this morning owing to a tie vote. Unfortunately there are fewer Delegates here now than there were this morning. Are you ready to renew that question?

Captain Luymes (Netherlands). -- I should like to say that the idea in proposing the following amended Resolution is not to give a right of control to the Bureau, still less to constitute a menace, but is to meet those Delegates who could not vote in favour of the Resolution proposed this morning. I therefore now propose the following: "The Bureau shall endeavour to learn, classify and report to future Conferences, variations by States Members from Resolutions adopted by a Conference".

The President. — Is there a second to this motion?

Captain Douglas (Great Britain). — I second the motion.

The President. — Are you ready for this question?

Captain Hori (Japan). — The Japanese Delegation will give its opinion after it has been able to study the new wording of the proposal.

(The session was suspended for a few minutes).

Captain Hori (Japan). — The Japanese Delegation regrets that it must announce that it cannot accept the new wording.

(A vote was taken).

(Adopted).

REPORT OF THE FINANCE COMMITTEE.

The President. — The additional sheet which has been circulated, headed "Memorandum on the Financial Administration of the International Hydrographic Bureau", was received from the Financial expert of the League of Nations, as is stated in the penultimate paragraph of the Committee's Report.

Please consider the first paragraph on page 2 of the Report of the Finance Committee, "Proposals Adopted":

"The Committee consider that the matter of the Belgian contribution should be referred to the League of Nations with a view to an attempt being made to recover the arrears. But at the same time they do not consider that any expense should be incurred by the Bureau in attempting to recover the money".

Are there any objections to the adoption of this resolution?

Admiral Niblack (Director of the I. H. B.). — The Delegate from the League of Nations, Dr. Harada, suggested an objection, that it was clearly not in the province of the League of Nations to be a debt collector and to intervene in this matter. I rather think he intimated that we would not get very far on the question, but I think the Chairman of the Finance Committee knows more about it.

The President. — Can the Chairman of the Finance Committee give us any information?

Captain Douglas (Great Britain). — Mr. President, this matter was fully discussed by the Finance Committee at their first meeting on the 30th October, and I then stated that I had myself consulted Mr. Harada on the subject and that he had told me, in effect, exactly what Admiral Niblack has said. At the same time, after a discussion with the various Members of the Committee, as you will see from the minutes of the proceedings, it was thought that there would be no harm done in asking the League of Nations to intervene in order to avoid any expense which might be entailed, should the matter be referred to the Legal Section of the Permanent Court of International Justice.

The President. — Are there further comments?

(Adopted).

Please consider the next paragraph:

"The Committee have taken note of the explanations of the Estimates and approve the procedure which is being followed at present".

Is there objection to the adoption of this by the Conference?

(Adopted).

Please consider the third paragraph:

"The Committee are of opinion that the Publications should be priced nearer to their cost price".

Are there any comments?

Captain Hooykaas (Netherlands). — As regards publications there was expressed a wish in the Committee, and the Chairman of the Committee agreed with me, that this matter should be brought before the Conference. The Committee was of the opinion that the reprint of the special publications

in the "*Review*" was not necessary, and they were further of the opinion that it would be less expensive and a much simpler method if all publications of the Bureau, the Special Publications as well as the "*Review*", were in future published as one uniform series of a non-periodical "*Review*", numbered consecutively. As soon as a study, or report, or an article by anyone of the Bureau, or anyone outside of the Bureau but accepted by them, is ready for issue, it should be published in an ordinary number of the "*Review*", two or more articles to be bound together if convenient.

The President. — Are there further comments ?

Admiral Niblack (Director of the I. H. B.). — I am very pleased that the Finance Committee seems to flatter the Bureau by valuing its publications higher than the Directing Committee has permitted itself to do.

The Secretary General. — With reference to the reprinting of most of the Special Publications in the "*Hydrographic Review*", this was done by the Directing Committee for the following reason. We issue Special Publications from the Bureau and they are despatched free of charge to the States Members, but our sale of Special Publications is to all intents and purposes nil. It was thought that by re-issuing them (which is not a very expensive item as it is only a question of the cost of paper, for the type is already set up), in the "*Hydrographic Review*", — which has a growing sale, especially amongst libraries of universities, colleges and various institutions, — that the contents of the Special Publications, which deal with more technical subjects than does as a rule the rest of the "*Review*", would reach a much larger public.

M. Fichot (France). — According to Article 46 (a) of the Statutes, the "*Hydrographic Review*" should appear periodically. Consequently, there would be some contradiction between this Article and the proposal of Captain Hooykaas.

The President. — Delegates will remember that the paragraph under discussion states that the Committee are of opinion that the publications should be priced nearer to their cost price.

Captain Luymes (Netherlands). — We do not get the "*Review*" at regular times, and there are cases in which it has appeared at quite irregular intervals. I do not think we should speak of a Special Publication as all parts of the "*Review*" reach the same public without even the smallest necessity to reprint special articles which appear in the "*Review*".

I should also like to call the attention of the Conference to the fact that a higher priced publication does not mean greater gain. If you ask 10/- for a publication you may not perhaps be able to sell it, but if you put the price at 2/- you may sell 600 copies. I believe that this is the intention of this paragraph. If we price our publications at almost their cost price, taking into consideration printing and so on, we shall get the benefit that they will reach a larger public.

The President. — Are there objections to the adoption of this paragraph as a resolution ?

(Adopted).

Please consider the next paragraph :

"The Committee are of opinion that a greater effort should be made to increase the number of sales, and suggest as a commencement that the Bureau should circularize the Hydrographic Offices and other similar institutions with a view to those Offices bringing these publications to the notice of the various organizations".

Are there objections to the adoption of this paragraph ?

(Adopted).

Please consider the next paragraph :

"The Committee are of opinion that the larger portion of the Bank deposits repayable at sight might, with advantage, be transferred to a deposit

account or even invested in some Government Stock or other Trustee Security so as to increase the rate of interest payable”.

If this were a Conference composed wholly of naval officers, I believe it would be agreed that this is a very dangerous paragraph. It involves an investment, or some investments, which may not result satisfactorily. Some investments do not.

Captain Hooykaas (Netherlands). — If you read the minutes of that Committee you will see that there was much talk about this, it being specially stated that there should be no speculation, but that the money would be invested in what in England is called Security Bonds, which are as safe as the Bank of England.

The Secretary General. — I think that the Conference would be throwing a very unpleasant duty on the Directing Committee, and would certainly put them on the horns of a dilemma. Now, this is worded in such a way — it talks of Government Stock and Trustee Security — that it rather suggests to my mind a British drafting. I do not know whether the Delegate of Great Britain is aware of the fact that it is said, in a good many financial circles on the Continent of Europe, that the pound, though apparently stable, is not overstable. Of course, I know very little about these matters myself; I can only speak of what I have heard. The dollar appears to be stable — I am talking of the United States dollar — but I should not like to say that it is going to remain stable. The Committee therefore is put in this position: if the resolution is adopted and the Directing Committee does not invest, it will be asked why it did not do so; if it does invest, it has no guarantee that it is not going to lose the money or some of it, and then it will be told that it has been speculating. It is an extremely difficult position, unless, of course, you will provide us with a Committee of financial experts to advise us. Then it is a different matter; we can throw the responsibility on to that Committee.

Captain Douglas (Great Britain). — May I mention that, if the Secretary was referring to the Report of the Finance Committee, you will see if you look up the meeting of 30th October that this was not altogether the wording of the British Delegate. In fact, the British Delegate said very little about it. You will see this from the minutes. At the same time I may state that it was thought at the time that it should be more a matter for financial experts. That is the reason why at the second meeting we discussed the matter of financial control, and really that is what I think this paragraph is bound up with. I think it would save the time of the Conference if the two were taken together at the end of these proposals.

The President. — Do you refer to the Memorandum of the League of Nations?

Captain Douglas (Great Britain). — I do.

The President. — The Chairman of the Finance Committee suggests that this particular question is closely allied with the memorandum which has more recently been handed to you and that they should be discussed together. If there are no objections that will be done.

Please consider the following paragraph:

“The Committee agreed that the arrangements made with regard to insurance of the personnel attached to the Bureau appear satisfactory.

Are there objections to the Conference adopting this?

(Adopted).

Please consider the next paragraph:

“The Committee having examined the statement of payments under Sub-head “Change of Residence Allowance” are unanimously of opinion that these are in excess of those allowed to officials taking up an appointment in similar circumstances, and consider that in future the payment should be as far as

possible brought into line with the system followed by the League of Nations. They are further of the opinion that visits of the Directors and Personnel to meetings and conferences should only be undertaken with a quite definite object and on such occasions every effort should be made to keep expenses low.

Are there any comments concerning this ?

The Secretary General. — With reference to the first part which states that the residence allowance is in excess of that allowed to officials taking up appointments in similar circumstances, of course, I do not know exactly what officials are referred to. However, from my knowledge of the British naval officials, or people connected with the Navy such as dockyard officials sent from home to take up residence abroad, I think that I may state that in most cases the Government supplies a house, and to a certain extent what is known as fixtures in the British Navy — that is a certain amount of furniture. We who come out here are not only uprooted from our country and from all our friends and sent out here to settle down, so to speak, in a strange country but, if we wish to make a home, we have got to bring out all our own personal gear, or do as I know one of the Members of the Directing Committee did at one time — leave some of it in store at home and pay storage on it. I do not think that the sums that were paid to Admiral Niblack or to me were in any way in excess of the amounts that it cost us. As a matter of fact I might add, for your information, that my expenses were not covered by the sum of £ 34.0., which I had to pay out of my own pocket.

Captain Douglas (Great Britain). — I should just like to mention one point which, I think, bears on the Secretary's remarks about British dockyard officials, and those taking up residence abroad. It is quite understood, and I know perfectly well, that when they take up residence abroad they are allowed a certain amount of fixtures, but I think the Secretary has forgotten this, or perhaps it was not the case in his day. Anyhow, at the present moment, they pay a heavy premium for the fixtures, amounting in many cases, especially in places like Hong-Kong, to possibly more than the furniture is worth. So that they do not get a house free, and fixtures for nothing.

The President. — For the sake of information, can the Conference be told what system is followed by the League of Nations in this respect ?

The Secretary General. — In one of the annual reports, I am afraid I do not remember which one, but it may have been that of 1922, the Auditor from the League of Nations, referring to this "Change of Residence Allowance", stated that it approximated to that which would have been received by these officers had they been in the Service of the League of Nations. I cannot tell you the exact wording, but it was to this effect.

Captain Douglas (Great Britain). — Referring to the minutes of the meeting on which this question is now raised, it was stated there by the Secretary of the Committee, Mr. Albert, of the International Hydrographic Bureau, that the travelling expenses had been fixed at a round sum, but I think all the Committee wished was that payment should be brought into line as far as that system compared with that followed by the League of Nations. If that is done, I think it will meet all that the Committee had in mind.

Admiral Niblack (Director of the I. H. B.). — For the information of the Conference I should like to say that the Bureau has a fixed scale of travelling allowances, and that that scale is more than 15 % below that of the League of Nations. I should be very glad if we could put our allowances somewhere near those of the League of Nations, but I think the reference to the League of Nations is unfortunate, as expenses would not be reduced so much as if the question were left to the goodwill and good intentions of the Directing Committee themselves. We are charged with the financial adminis-

tration of the Bureau, and we try to keep all the expenses down as far as possible. As regards the character of the visits made to meetings or conferences, there has been a difference of opinion in the Directing Committee itself; but there is no way of finding what are the most important Conferences, unless we take it solely from the hydrographic standpoint.

The President. — The question is upon the adoption of this paragraph as a resolution by the Conference. The Conference will, if it adopts this, be of a certain opinion. Is there objection to its adoption?

(Adopted).

Captain Hooykaas (Netherlands). — A mistake has been made in the paragraph you have just accepted. On line 1 of page 3 appear the words: ".....to be undertaken with quite definite objects. On such occasion every effort should be made to keep expenses low". I am afraid one word has been left out. Of course every visit is made with a definite object, but the idea implied is: "with a quite definite *hydrographic* object". The view was expressed that some visits were made to conferences which had very little to do with hydrography, and that is why we want to put "quite definite *hydrographic* object".

The President. — While not objecting in any way to the adoption of certain opinions by a Conference, and this Conference particularly, the Chair is of the opinion — a personal one — that the Eligibility Committee and the wishes of the Conference as expressed might be considered a vote of confidence and unless some member of a Directing Committee or some Secretary General is found wasting money, I should very much prefer to say: "You run it". I understand that you have made a motion that the word "Hydrographic" be inserted.

Captain Hooykaas (Netherlands). — The same thing is already expressed in the paragraph under discussion. It does not alter the latter; it is only another way of expressing the same thing.

Admiral Niblack (Director of the I. H. B.). — Would it be too much to ask Captain Hooykaas if some of the visits which do not conform to the idea he has in his mind could be specified?

Captain Hooykaas (Netherlands). — I am not perfectly sure, but I think that one of the members of the Committee talked about the visit that was made by Admiral Parry to Madrid, or Cairo.

The President. — The Chair is informed that the Secretary General has made a trip connected with administrative work. I am afraid that if we put in that only a hydrographic object shall be entertained, it may be construed to mean that he would be prevented in the future from making such a trip.

Captain Hooykaas (Netherlands). — I think you are taking the matter too seriously. We thought it better to express what the Committee actually meant when they put in the word "hydrographic"; but if it entails so many difficulties I might as well drop the whole question.

The Secretary General. — I suggest to Captain Hooykaas that it might meet his wishes if we were to alter the line at the top of page 3, so that the paragraph reads as follows:

"They are further of opinion that visits of Directors and personnel to meetings and conferences should only be undertaken with a quite definite object connected with the work of the Bureau, and on such occasions every effort should be made to keep expenses low".

The President. — Is there objection to the insertion of the words?

(Adopted).

Please consider the next paragraph:

"The Committee adopted the proposal to leave to the Directing Committee

within the next four years, when the lease falls in, to consider the future accommodation of the Bureau, with a view to the rental not being increased and the possibility of procuring other quarters more suitably placed without increase in cost, or of buying or building premises outright".

Are there comments or objections?

(Adopted).

Please consider the next paragraph:

"The Committee propose that this Distribution List should be scrutinized by the various States Members, with a view to its being revised, and that in those cases where copies of the Bureau's publications are sent to the various editors of magazines and such like people, the Bureau should make it their duty to see they obtain publications in return. The list should also be revised every year by the various States Members".

Are there comments?

(Adopted).

We will now take the next paragraph:

"The Committee agreed unanimously that the insurance arrangements are satisfactory and that the insurance against theft and burglary is unnecessary."

Are there objections to its adoption?

Mr. Richards (Egypt). — I see that it is stated that insurance against theft and burglary is unnecessary. Perhaps there is nothing to burgle?

The Secretary General. — I think that the reasons are probably these: First, there is nothing much to steal which would be of interest to a burglar. Our collection of charts and our books are all technical documents. We have a small safe it is true, and lately there have been one or two thousand francs in it, but this safe is locked and securely bolted to the wall. I do not think the furniture is of very great interest to thieves. In any case we have an Office Keeper who lives on the premises and is always there, and there is also a concierge who lives on the ground floor. The building is thus well guarded, and it is for these reasons that it has been considered that insurance against theft is unnecessary.

The President. — Are there objections to the adoption of this paragraph?

(Adopted).

The next paragraph:

"The Committee having considered the expenditure on the maintenance of Office, and light, fuel and water, did not consider it excessive".

Are there objections to the Conference adopting this?

(Adopted).

The next paragraph:

"The Committee have no observations to make under the head "Translations, Extracts, etc.". As regards the Calculation of Harmonic Constants, the Committee do not wish to express an opinion, but wish to leave it to the Committee on Tides".

The Chair suggests that there is nothing to adopt in this. If there is no objection the Conference will pass to the next paragraph:

"The Vice-Chairman thought that the premium for Bank insurance might be reduced if a part of the capital of the Bureau was transferred into securities as had been suggested".

The Chair suggest that this paragraph is closely allied with the one on page 2 which was postponed. If there are no objections, it will be considered with that. The top of page 4 is a part of that paragraph, *i. e.*

"The Chairman suggested this should be mentioned in the report to the Full Session."

The next heading is "Entertainments and Visits - Minor Expenses".

The Chair finds nothing to adopt.

The next paragraph is, of course, very important.

"The Committee wishes to place on record their gratitude and thanks to the United States Hydrographic Office for their kindness in publishing, for the benefit of the States Members, sheets showing systems of buoyage, *etc.*, and suggest that this expression of thanks be endorsed by the Full Session".

Does the Conference wish to adopt this?

(Adopted).

The Delegate from the United States takes the opportunity to express his personal appreciation and to say that future Conferences and the International Hydrographic Bureau may count upon obtaining all assistance possible from the Hydrographic Office of the United States Navy.

(Applause).

The President: — The next paragraph: "Furniture and Instruments". The first line requires no adoption.

The following paragraph should be passed upon:

"The Committee resolve that the States Members should advise the International Hydrographic Bureau of any hydrographic publications which might be of value to the Bureau, so that the Bureau could purchase them, or possibly obtain them gratuitously.

Are there any objections to its adoption?

(Adopted).

We have now the single sheet:

MEMORANDUM ON THE FINANCIAL ADMINISTRATION OF THE INTERNATIONAL HYDROGRAPHIC BUREAU.

"The financial control of any institution comprises the following three functions:

- 1) Scrutiny of the Budget;
- 2) Control of economical expenditure of the funds;
- 3) Audit of the accounts.

As far as the financial administration of the International Hydrographic Bureau is concerned, the first and third functions of the control are performed respectively by the International Hydrographic Conference which draws up the Budget every five years and by the official Auditor of the League of Nations who annually audits the accounts to see if they are correct.

But if it is considered necessary to make special arrangements for controlling the economical expenditure of the funds, the following might be suggested:

1. that the Auditor should be requested to draw up a separate report on this subject, quite apart from his report on the correctness of the expenditure;
2. that a "Supervisory Committee" should be set up, composed of, for instance, two or three financial controllers of the respective Admiralties of the States Members of the Hydrographic Bureau. This small Committee might thus be able to examine in greater detail the special report submitted by the Auditor. However, in view of the fact that such a Committee will incur not a little expense vis-à-vis the limited Budget of the Hydrographic Bureau, it should also be suggested, that the proposed Committee would not meet automatically, but only in the following cases:
 - (a) if a State Member of the Bureau asked that it should do so, or
 - (b) if the Auditor expressed the opinion that it would be well for it to meet.

Our reasons for this suggestion are that, on the one hand, a Committee of three people coming from three different capitals is somewhat expensive but, on the other, the appointment of only a single controller does not give satisfaction to the majority of Members, and may also lead to great difficulties from

the point of view of the Bureau itself. We believe that most Governments do not take into consideration the question whether the control machinery costs more than the amount it is likely to save, but it seems evident that the Hydrographic Bureau, with its limited Budget, must consider this aspect of the question ”.

and with this we must include the last paragraph on page 3 of the Report :

“ The Vice-Chairman thought that the premium for Bank insurance might be reduced if a part of the capital of the Bureau was transferred into securities as had been suggested ”.

and also the last quoted paragraph on page 2 :

“ The Committee are of opinion that the larger portion of the Bank deposits repayable at sight might with advantage be transferred to a deposit account or even invested in some Government Stock or other Trustee Security so as to increase the rate of interest payable ”.

The question presented by these three parts of documents appears to be whether or not the Bureau shall have a financial control.

The Chair is of the opinion that the alliance or connection with the League of Nations, which has been made very apparent to the Chair, and in which it is understood financial experts exist, may well be control enough. This statement is made with the mental reservation that under no circumstances is the individual occupying the Chair able or willing to advise on financial matters unless it be to spend your money.

The Secretary has information which I believe will be of interest.

The Secretary General. — When I made the recent visit to Geneva, of which mention has already been made, I discussed several administrative subjects with various portions of the Secretariat of the League of Nations. Amongst other things I learnt that the League of Nations had, about two years ago, established what they call a “ Control Section ”. Originally they had a Finance Section only which sent out auditors, but they now have Control Officers who not only audit accounts but examine the finances of the various Departments of the Secretariat of the League. Apart from that they are sent out to those International Organizations which desire to have their accounts controlled, which means more than just auditing. These officers are authorised to audit the accounts, criticise the methods, and advise improvements, but they have no authority to enforce any of their criticisms or advice. I might add — it may have been noticed — that in the audit made by Mr. Watterson to which reference has been made in the book entitled “ Proposals Made ” this gentleman criticised, advised and made suggestions ; this had never been done previously by any Auditor sent by the League of Nations, the reason being that Mr. Watterson belonged to the Control Section and not to the Accounting Section. The Control Section is entirely apart from the Accounting Section, and even criticises and controls that Section of the League of Nations.

I think that this information might assist the Conference to come to a decision as to what form of control should be used, for it is obvious that if a Control Officer comes to the Bureau and makes criticisms, gives advice, makes suggestions, *etc.* , — unless, of course, there were very good reasons against it — the Directing Committee would submit all these remarks, advice and suggestions to the States Members who could endorse or refuse them.

Captain Douglas (Great Britain). — Mr. President, although I am not a financial expert, and of course cannot speak authoritatively, this appears a satisfactory solution, and will, if adopted, automatically settle paragraphs (2) and (3) of the Report of the Finance Committee, and thus relieve the Directing Committee of the Bureau from the responsibility of investments, *etc.*, which, it is fully realized, is a somewhat heavy responsibility.

The President. — The Chair has written a few lines which might serve as a draft of a resolution :

“ The Conference resolves that the Directing Committee of the Bureau shall take advantage of the Financial and Control Sections of the League of Nations in handling the funds of the Bureau ”.

Is this suggestion agreeable to Members of the Finance Committee ?

Captain Hooykaas (Netherlands). — I agree.

Captain Douglas (Great Britain). — I am in agreement.

The President. — The Committee on Finance generally agrees. Is the Conference in agreement ?

(*Adopted*).

Captain Schweppe (Germany). — May I ask the name of the official of the League of Nations ? We made a resolution as to Article 45, and we spoke there of an *Auditor* of the League of Nations. Will it be necessary to change this phrase ?

The President. — The Chair believes that the Resolution just adopted refers to the handling of the funds and a method of obtaining expert advice for that purpose. In addition, there is an Auditor.

Captain Schweppe (Germany). — I agree.

The President. — It is now understood that this Conference desires the audit as before, and in addition, advice from experts as to how funds are to be handled.

Unless there are further comments, this completes the report of the Committee on Finance.

The Conference will now consider the

REPORT of THE COMMITTEE ON TIDES.

Please take the part quoted about the middle of the page :

“ To recommend a more general use by mariners of methods of prediction based on the use of Harmonic Constants: information relative to Tides which is to be shown on charts is left to the discretion of the various Hydrographic Offices whether or not they issue Tide Tables ”.

Are there any objections to the adoption by the Conference of this as a Resolution ?

(*Adopted*).

Please take the next quoted paragraph :

“ Considers that it would be better, for the present, to leave to States and Hydrographic Offices complete latitude in the drawing up of their *Sailing Directions* in so far as concerns Tides according to their usual custom and in the manner best suited to the practice of the mariners of their own nation ”.

Are there any objections to the adoption by the Conference of this as a resolution ?

(*Adopted*).

Please consider the last paragraph on the first page :

“ The Committee expresses the desire to see the mariner more familiar with the use of Harmonic Constants for the prediction of tides in practice ; it is left to each Service or to each mariner using Harmonic Constants to choose the method which appears most practicable.

Does the Conference wish to express this same desire. The Chair sees no objection.

(*Adopted*).

Please refer to page 2. The Chair suggests that the four quoted paragraphs should be considered at the same time :

The Committee recommends :

“ The publication by the International Hydrographic Bureau of a volume containing standard harmonic constants for the whole world.

" This basic volume should be kept up to date by the issue of a periodical supplement (annually).

" The definite arrangement of this publication shall be determined by the International Hydrographic Bureau as soon as possible after obtaining authoritative opinions from the Offices interested.

" All detailed information as to observations and the period during which they were made should be provided".

Are there any objections to the adoption by the Conference of these four paragraphs?

(Adopted).

Is there any objection to the next paragraph, which is not quoted: The International Hydrographic Bureau shall make every effort to procure from the Administrations interested the Constants for those places which it lacks.

The Secretary General. — Would not the French Delegation prefer a more precise French wording in this paragraph which refers to " places wanting". It is obvious that it is not the *places* which are wanting but the *harmonic constants*.

M. Fichot (France). — I propose the following wording:

" ...the Harmonic Constants of those places for which they have not yet been published".

The President. — The Secretary will adjust this text to read as obviously intended unless there is objection.

Is that acceptable?

(Adopted).

We will now consider the quoted paragraph of two lines:

" Tidal datum should be the same as Charts Datum, and should be a plane so low that the tide will but seldom fall below it".

Are there any objections to the adoption by the Conference of this paragraph?

(Adopted).

Are there any objections to the adoption by the Conference of the next paragraph in quotation marks?

The Committee expresses the desire:

" That it is necessary to show clearly on charts and in Tide tables, a reference to mean sea level of this datum for soundings".

(Adopted).

It has been pointed out that the heading " Translation into English of Headings, *etc.*" should have the words " into English" deleted, because the text reads " in English or in French for example".

Is this acceptable to the Tides Committee?

M. Fichot (France). — This text was drawn up following a proposal made by the British Delegation itself.

Captain Fablet (Argentine). — The Argentine Delegation asks that, if a language other than that of the issuing nation is to be used, English shall be the only one permitted.

The President. — Is there any objection to the adoption by the Conference of the paragraph:

Translation of headings, etc., of Tide Tables.

" The Committee recommends, principally for Tide Tables which are not published in Roman characters, that summary indications, in English or in French for example, should appear in the Headings of Divisions or of columns so as to render the use of such publications more international".

Professor Tenani (Italy). — I propose that the summary information referred to in this paragraph shall be translated into the principal European

languages and appear as an appendix. This may be, perhaps, a better solution than that proposed by the Committee.

M. Fichot (France). — The wording proposed is as follows:

".....that summary information, in English or in French *for example*".

Thus this wording does not exclude the use of any other European language.

The President. — Does the Conference wish this text to be adopted? (*Adopted*).

The Report of the Committee on Tides has now been dealt with.

REPORT OF THE COMMITTEE ON CHARTS AND DOCUMENTS.

The Chair has a suggestion to make in connection with some informal conversations held with Delegates in connection with the report of the Committee on Charts and Documents. The Chairman of that Committee has told the Chair that it would be impossible to submit a good report within a reasonable time, because of the large volume of minutes of that Committee.

The Chair suggests that this Conference, in view of the conditions, might well adopt a resolution to the effect that the report of the Committee on Charts and Documents shall be completed, and that copies shall be sent to States Members and their comments requested by mail. It appears that practically every State Member was represented on this Committee and its decisions therefore include the decisions of a majority of the States Members.

It is quite impossible to present a really excellent report now, and there is not sufficient time for the discussion which that report would warrant. The Chair therefore requests you to consider this proposition as one which will give each State Member an opportunity to say, through its own Office at home, anything it wishes and it will be to the advantage of other States Members who will be notified of these observations by the Bureau. The term "States Members" has been mentioned, but it should not be exclusive. Other States should have the opportunity of reading this Report, and States Members should have the advantage of considering the comments by such other States.

Does any Delegate wish to submit another proposition?

Captain Luymes (Netherlands). — I agree with what you propose.

Captain Douglas (Great Britain). — The British Delegation agrees.

The President. — A motion had been made and seconded to the effect that the Conference will not wait for a full and complete report from the Committee on Charts and Documents, but that this Report will be sent to States Members and others with a request for their comments. These comments, when received by the Bureau, will, at their discretion, be sent to those eligible.

Are there any objections to the adoption by the Conference of this proposal?

(*Adopted*).

There is still some unfinished business. I would refer you to the index of the book "Proposals made".

The Chair considers that everything down to "V b. Miscellaneous", has been suitably handled.

1. TRANSCRIPTION of NAMES.

We now come to the item: "Transcription of Names", page 45. The Secretary states he has information which may be of interest.

The Secretary General. — This question of transcription of names is an extremely difficult one, and in the early days of the establishment of the Bureau, I was instructed by the Directing Committee to get into contact with authorities on this subject. I naturally turned to the Permanent Committee

on Geographical Names, which was established by the Royal Geographical Society of London, with the financial support of the British Government, which financial support has since been withdrawn. I received a very pertinent reply from the Chairman of this Committee on Geographical Names and a similar type of reply was received from — if I remember rightly — the Hydrographer of Sweden. I am not absolutely sure that it was he. At any rate, the replies were to the effect that there were Committees set up in the States concerned for the purpose of deciding the spelling of names, and certain recognized authorities were appealed to in the matter; the transcriptions were made in accordance with the opinions of these authorities. But — and this is the important part of the replies — the British letter stated that the transliterations of names not written in Roman characters were made entirely for the use of *English speaking* people. I am not sure that they would be quite suitable for American English-speaking people because the pronunciation of vowels with the English accent is different from the pronunciation of vowels with the American accent. Though a good reproduction of the sound or perhaps of the local pronunciation might be given by the English use of the vowels, there might not necessarily be a correct reproduction by the American use of the English vowels.

You will find that there are very few authorities in perfect agreement on the transliteration of names not written in Roman characters. The Japanese Government has very wisely adopted a definite system; information was given to the States on this subject by means of a Circular Letter issued about six months ago. But other nations have not adopted such definite methods. I have a little knowledge of Chinese names, having made a good many surveys on the coast of China and up the Yangtse River; I found that the Chinese Authorities in those parts where foreign languages were spoken, had adopted a certain method of transliteration, but that this did not seem to be accepted by many of the foreigners in the country. This makes the subject extremely difficult. For instance, the Chinese have adopted *Chungking* as the official transliteration of the name which they call Chungching. That is accepted, as it happens, by the British, and also, I believe, by the Americans. But I am perfectly well aware of the fact — particularly as I am a stamp collector and purchased official sets of stamps in Chungking — that the French reproduce these sounds by *Tchongking* which, of course, is quite different. I have simply placed this information before you in order to help to solve the question which is now before the Conference.

The President. — Assuming that Members have read the Bureau's proposal.....

Captain Hori (Japan). — As Japan has been mentioned in the speech of the Secretary General, the Japanese Delegation feels obliged to express its views on this question. In the opinion of the Japanese Authorities the transcription of names into Japanese is an extremely difficult matter to do in a single manner. The Japanese Authorities have come to the conclusion that it is easier for all States to prepare a list giving the names of various places in Japanese characters and in Roman characters, with positions indicated by latitude and longitude, and they are now drawing up a list of the principal places on the coast the names of which appear on charts and in books.

Commander Shao-Chung (China). — I agree with the Japanese Delegation.

The President. — It appears then to be the opinion of those who have expressed themselves on a universal system that that is an impossibility. This I believe, though with less experience than some of those who have spoken. Is it the wish of the Conference that this Proposal be rejected?

Captain Douglas (Great Britain). — I agree, Mr. President, that it appears very doubtful whether we could find a system which could be generally accepted by the various States Members.

The President. — The question is then on the rejection of this proposal. Is there objection?
(Rejected).

2. DISTINGUISHING SIGNAL FOR SURVEYING VESSELS.

The Bureau proposes that :

"Vessels which are actually employed on Hydrographic or Oceanographic Work shall, when necessary, display the day and night the signals of Article 4 (a) of the "Regulations for Preventing Collisions at Sea", which indicate *a vessel not under command*".

Admiral Niblack (Director of the I. H. B.).— A great danger in providing a signal for a vessel, a signal such as a distinctive flag, lies in the fact that in case of collision due to the assumption on the part of the surveying vessel that she has some particular right, no Admiralty law or Admiralty Court would justify her in claiming a right of way because she flew a particular flag; so the Proposal of the Bureau is intended to give her a standing in Admiralty law by using a recognized international signal. That is the reason why the Bureau has got away from the idea of a distinguishing flag. It seems to me that the Proposal of the Bureau is perfectly safe and satisfactory from the Admiralty law standpoint, and it has only to be considered that certain other countries such as Australia, Great Britain and Italy have shown and used signals for vessels picking up and laying telegraph cables. If we desire uniformity there must be some concession, but it would seem that, in the case of any further international Conference on maritime matters, there may be other international signals put forward and this may lead to a surveying vessel claiming special privileges of exemption from the rules of the road.

Captain Hori (Japan). — The Japanese Delegation is in favour of adopting a rule, similar to Article 4 (b) of the Regulations for Prevention of Collision, for ships carrying out hydrographic work.

It would direct attention to the fact that there is a small error in the "Explanatory Note". Japan is mentioned in the fourth paragraph, which is wrong, and the wording should be as follows: "Three Members have already adopted Article 4 (a), viz. Denmark, France and Portugal." In reality, in Japan no signal for this purpose has yet been adopted.

Commander Rasikotsicas (Greece). — The Greek Delegation cannot accept the Bureau's proposal.

In actual fact, the day and night signals provided by Article 4 (a) of the "Rules of the Road" refer to ships which are no longer under control. This deals, therefore, with a case of "force majeure" which relieves the vessel in such condition of all responsibility. Thus this provides for an extremely serious circumstance and we think that every precaution should be taken to avoid confusion with other circumstances.

We consider that it would not be wise to adopt these signals for vessels carrying out hydrographic or oceanographic work for, in most cases, such vessels are under full control. In fact, in case of collision, they would be held responsible and could not claim "force majeure" in defense. It appears to be necessary, therefore, to provide some similar signal, such as, for instance, that now in use by ships laying or picking up telegraph cables.

In 1924, the Greek Hydrographic Office put forward a proposal that the International Code flag *H* hoisted at the fore mast-head should be adopted as the signal; but, after hearing all the opinions expressed, the Greek Hydrographic Office considers that it would be preferable to employ shapes.

Admiral Niblack (Director of the I. H. B.). — You would have the same difficulty if you were laying or picking up a cable as you would if your vessel were not under command, and the Proposal of the Bureau says that if

we must have a distinguishing mark, it shall only "when necessary" display it, *etc.*, which means that, when a vessel is in such a position that she wants to claim the right of way she has international usage and law in her favour, and this is better than if the Bureau should propose a flag which would not, by international agreement, be valid in Admiralty law without giving an additional signal similar to that usually used. You observe therefore that the Bureau proposes that a vessel actually employed on hydrographic or oceanographic work shall, "when necessary", display the day and night signals. This Proposal is with a view to precluding, or rather to replacing the proposition of having a special flag.

Captain Schweppe (Germany). — I agree with the Proposal of the Bureau, but I should like to draw your attention to yet another point. It occurs at present that vessels in the North Sea, for instance, anchor for scientific purposes, and we think it necessary to introduce a new signal for those ships because nobody—or perhaps few could look at it from a different point of view: we must draw the attention of seamen to the fact that they may meet ships at anchor in the open ocean. If the Conference is of opinion that this is all right, then we could make a further proposition.

The President. — The question is upon the adoption or rejection of the Bureau's Proposal for a distinguishing signal, and the Bureau proposes the same one as quoted here. Article 4 (a). Are you ready for the question?

Admiral Niblack (Director of the I. H. B.). — Regarding Signals for vessels not under command, the International Code flag "H" is, or would be, the flag to be adopted on account of the letter "H" corresponding to the sound signal which is used, under the Rules of the Road, for a vessel not under command. The Morse letter "H" is the sound signal "not under control", and if there is adopted, by an International Conference, correspondence between the signal flags and letters of the International Code and the Morse sound signals, as authorised under the existing Rules of the Road, then the "H" flag would be displayed. So it is in agreement with the probable development of this question.

Captain Douglas (Great Britain). — Mr. President, as you know from this report, the signals for a vessel working on telegraph cables have been found sufficient to meet the British requirements, and so no objection is seen to the introduction of a special signal for the purpose, but of course, as Admiral Niblack points out, this is a matter for international agreement, and at present it has not seemed possible. I suggest that all that the Conference should do would be to adopt a Resolution that some special signal should be devised.

The President. — This proposal naturally divides into three parts, one of which has just been stated; another of which, shall it be 4 (a)? and yet another, shall it be 4 (b)? Those three questions are already before us. If the first be decided in the affirmative and the other two in the negative, then yet another will have to be considered.

During the next five years there is bound to be some big Maritime Conference and this question will be on the Agenda.

Commander Rasikotsicas (Greece). — I second the proposal made by Captain Douglas.

The President. — It is moved and seconded that this Conference adopt a Resolution stating that a signal shall be adopted for surveying vessels. Are you ready for the question? Those in favour of adopting a signal please indicate by raising a hand.

(Adopted).

Is the Conference ready to vote as to whether Article 4 (a) shall be adopted?

Admiral Niblack (Director of the I. H. B.). — Does not the adoption of the Resolution just made settle the question for the moment ?

Captain Douglas (Great Britain). — I understood that too, Mr. President.

Captain Schweppe (Germany). — And I.

The President. — If that was in the motion of Captain Douglas which was duly seconded and which has been adopted, then it is not necessary to vote further. The Chair then understands that this question is settled by a Resolution stating that this Conference believes that a signal should be adopted.

7. CATALOGUE of GEOGRAPHICAL POSITIONS

Please consider No 7 of the Miscellaneous Index.

The United States of America (H. O.) propose that :

"a plan be carried into execution by the International Hydrographic Bureau for the compilation of a standard Catalogue of Geographical Positions for the benefit of Hydrography and Navigation".

Are you ready to vote ?

Captain Schweppe (Germany). — We are of the opinion of the Bureau, namely that it is preferable that every nation should make its own list of such geographical positions as it thinks necessary, and that such lists will be at the disposal of every State Member when requested.

Captain Luymes (Netherlands). — Mr. President, it is not stated of what points the position is required, neither is it defined what will be the benefit to Hydrography and Navigation derived from the proposed catalogue.

As far as Navigation is concerned, the positions that are of interest may be found in existing publications, *e. g.* those of wireless stations in the lists of Wireless signals.

As to Hydrography, it may be that the intention is to have the positions for the eventual use of surveyors. But in the first place such surveys should be made by the country that owns or controls the coast and if that country has determined the positions concerned it will have generally also surveyed the area in question.

Secondly, several positions in countries, that are not yet triangulated geodetically, will not be known with such accuracy that a survey can be based on a, or on some, given positions without further information. Discrepancies may have been found between nautical triangulations and the results of astronomical observations, which discrepancies will have been adjusted as well as possible. Such discrepancies, due to abnormal attraction of the earth, have been observed in the East Indian Archipelago, amounting to 40' and more. What position should be given in such cases ? The astronomical, that found by triangulation, or the position allocated to the point after adjustment ? It is evident that knowledge of all particulars is necessary if a new survey is to be based on positions which are liable to discrepancies of this nature.

I agree, therefore, with the comment of the Bureau and deem it preferable, if positions are wanted by a Hydrographic Office it should apply directly to the Hydrographic Office in question.

Captain Douglas (British Empire). — The United States Proposal is fully endorsed by the British Delegation, especially as the compilation of such a catalogue is one of the first tasks which was assigned to the Bureau by the London Conference. The objections raised by the Bureau would apply to any other international compilation. No difficulty should be experienced in keeping such a catalogue up to date by issuing revisions or supplying corrigenda provided that Members undertake to send new geographical positions to the Bureau. I should like to add that, as regards the Statutes which specifically indicate the Work of the Bureau and which were drawn up by the London

Conference, Article 9 (a) on page 5 specifically indicates the Work of the Bureau as "drawing up and publication of various lists, such as of geographical positions, of abbreviations and conventional signs used on charts".

I may add in conclusion that this paragraph 9 (a) was referred to the Statutes Committee and passed by them without comment and without alteration, and therefore it suggests that the Members of the Statutes Committee should be in agreement with this Proposal.

Admiral Niblack (Director of the I. H. B.). — It may clear the situation to say that the difficulty encountered by the Bureau, in connection with geographical positions, is to know what exactly is wanted. It is very valuable to have in Light Lists, for instance, the geographical position of the Light or of a Buoy, or of a beacon or of some object which is definitely fixed. In that sense it is a navigational aid, it aids to fix the position of a ship with regard to a wreck, a collision or, where it is desired, to determine the position of a ship geographically. Is what is wanted astronomical positions? That is a different thing, as Captain Luymes has said. It might clear the air to give a better definition of "geographical position". There could be a valuable list of positions of capes and lighthouses given in the geographical Table of the International Code of Signals; the position of life-saving stations or some other objects on charts and in all kinds of catalogues might be given, but if what is wanted is an astronomical position then I think it should be definitely stated. That has been the real difficulty in the matter.

The President. — It is perfectly easy to state what is wanted. A list as complete as possible, of geographical positions which will aid navigators in one way or another. Any such list prepared this year, or next year, cannot possibly be complete; a beginning should probably be made and the list made larger as time goes on. I myself can see no possible use to States Members of having the geographical position, determined astronomically, of an observation spot way back in the hills of some country in which they are not particularly interested. I do not conceive that any position not of use to a navigator could be included in this sense.

Are there any further comments?

Captain Luymes (Netherlands). — Mr. President, it is not clear to me of what use such a list will be to a navigator. He has large-scale charts and can take the position which he wants from these. Further I have pointed out that several positions are given in the List of Wireless Stations, consequently seamen have enough information to know their position. Is it light-houses, conspicuous rocks, or what is it of which the geographical position is wanted? It is not clear to me.

Admiral Niblack (Director of the I. H. B.). — Evidently I have not made my meaning clear. I have used many thousand times in the Bureau the Index to the London "*Times Atlas*" which is published for the purpose of identifying places spoken of and in order to obtain their latitude and longitude. Now that is sufficiently accurate for what you might call the purposes of Hydrographic Offices. If the purpose of determining these geographical positions is to adjust charts for engraving or re-engraving or re-adaptation, or some other purpose, that is another thing. The question is — to what degree of accuracy this position is to be given. Is it to be given to a fraction of a second or to a fraction of a minute? Then, too, the purpose should be more clearly stated. The geographical position exists whether you state its latitude or longitude or not, but you should give a statement as to what you regard as a "geographical" position.

Commander Rasikotsicas (Greece). — I support the proposal made by the Representative of the United States as to geographical catalogues, and all the more so because, in our country, we have noticed very considerable differences on charts. It would be extremely useful to know whether the coordi-

nates are calculated from astronomical observations or by connection with the triangulation of the country.

The President. — My personal opinion of such a list is that it should be as complete as possible and that positions should be as accurate as possible. To seconds, if possible. That such a list should begin and be continued. Are you ready for the question? The question is upon the acceptance of the Proposal. Those in favour of the Proposal please indicate by raising a hand.

(Adopted).

Admiral Niblack (Director of the I. H. B.). — Now that the Resolution has been adopted, the Bureau will have to find out from various countries just what geographical positions they would like to have and of what objects positions should be given. It will entail a great deal of work in the Hydrographic Offices. The Bureau has no means of determining the geographical or astronomical positions, or the use and importance of the list, or how complete it should be and how voluminous, that will depend on the Hydrographic Offices. It will be a question that we shall have to go over with the various Hydrographic Offices and their goodwill will largely influence the result.

The President. — The Chair believes that Hydrographic Offices desiring such a list will furnish the data. His confidence in the International Hydrographic Bureau permits him to expect the results from that.

Please consider N^o

8. VISITS TO HYDROGRAPHIC OFFICES.

Sweden proposes to consider:

"What measures could and should be taken in order to facilitate visits for study between the different Hydrographic Services".

Commodore Reinius (Sweden). — On account of the comment of the Bureau I will confine myself to proposing that the Conference should recommend that such visits for study are of importance, and at the same time I hope that such visits may, as far as possible, be facilitated and have the sympathy of the Conference.

The President. — That is accepted by the Chair as a motion. Is it seconded?

Captain Schweppe (Germany), **Captain Douglas** (Great Britain) and **Captain Bjørset** (Norway) supported it.

The President. — It is moved and seconded that this Conference take cognizance of the advantages to be obtained by persons connected with one Hydrographic Office visiting another such Office.

Are there any objections to the adoption of this as a Resolution?

(Adopted).

The Delegate from the United States takes pleasure in announcing that the Hydrographic Office of the United States Navy will welcome visits at all times from all other Hydrographic Offices.

M. Fichot (France). — All Heads of Hydrographic Offices will certainly make the same declaration.

9. MEASURES TO PROCURE GOOD HYDROGRAPHIC LITERATURE.

The President. — Please consider N^o 9:

Sweden proposes that:

"The Directors should issue the needful regulations for a satisfactory solution of this question".

Commodore Reinius (Sweden). — In the Swedish proposal it is suggested that, every year or every alternate year, the Directing Committee should announce several subjects for a prize competition, and that those essays which

are considered valuable should be rewarded by money prizes, and I will now add — “ or medals ”.

Further, it is proposed that the Directors should issue the needful regulations for a satisfactory solution of this question.

The Bureau has found it preferable to give the proposal the following form “ the compilation of publications to cover the deficiency in good hydrographic literature should be undertaken as soon as possible by the Hydrographic Offices of the Members by sending articles for the *Hydrographic Review*, which has been established for just this purpose ”.

In the Statutes, Article 6, paragraphs (v) and (vi) deal with the objects of the Bureau and the following is said :

The Bureau has as its objects :

“ (v) to encourage the adoption of the best methods of carrying out hydrographic surveys ”.

“ (vi) to advance the theory and practice of the science of Hydrography ”

With regard to these regulations I find it reasonable to maintain my proposal, at least as to the main points. At the same time I wish to say that it seems to me probable that such an arrangement will stimulate the eventual authors much more than the proposal made by the Bureau.

The President. — The Delegate from the United States is opposed to unloading upon the International Hydrographic Bureau the necessity to read and pass upon, in a competitive sense, a number of papers. I believe that the same end will be reached by paying for literature used. I also believe that the Directing Committee can and will assign values and pay in accordance with facts.

Captain Douglas (British Empire). — Mr. President, the British Delegation agrees generally with the Swedish proposal, which appears to be entirely commendable in principle. Of course the details would require further consideration and I would point out that it is suggested in the Explanatory Note from Sweden that the Directing Committee might, if thought advisable, call in Hydrographers or other experts to help in scrutinising and judging the essays. I therefore second the Swedish proposal.

The President. — Are there other comments? The Chair then understands the question to be that the International Hydrographic Bureau shall issue the necessary instructions.

Admiral Niblack (Director of the I. H. B.). — Regulations.

The President. — Regulations which will begin a series of Articles to be written for which prizes shall be awarded.

Commodore Reinius (Sweden). — Or medals.

The President. — I think “ regulations ” would cover that. Are you ready for the question? Those in favour of this Resolution please indicate same by showing a hand.

(Carried).

It is now 1820. We cannot hope to finish tonight unless we stay unnecessarily late. If no objections are raised there will now be adjournment until 0915 to-morrow morning. The Chair sees no reason now why this Conference should not cease about noon to-morrow or even sooner.

The meeting rose at 1820.

CHAPTER VIII

The eighth Plenary Session was held on Wednesday, 10th November 1926, the Vice-President in the Chair

ANNOUNCEMENT BY THE PRESIDENT.

The President. — The Chair is glad to announce that the Chairman of the Committee on Charts is very much pleased with the decision taken by the Conference yesterday in connection with the Report of that Committee. He assures us that the Report he will submit will be a good one and that each Member will get it in, say, one month.

The Report of that Committee, which has just been distributed, is to be considered as a preliminary, and not as a final report. It is for the use of Members, but must not be taken seriously as the final one.

Please consider Section VII of Proposals Made. "Surveying."

USE OF AIRCRAFT FOR SURVEYING. The Bureau proposes "that those Nations which use aerial photography for surveying and have not yet sent a report as to the subject to the Bureau should do so". Are there any comments?

Admiral Niblack (Director of the I. H. B.). — In the early days of the Bureau, the French Hydrographic Office contributed a very valuable article on "*Aerial Surveying*", which appeared in Vol. I, No 1, of the "*Hydrographic Review*". The Bureau has recently received various requests, particularly from the Chinese Government, for information as to methods of aerial surveying, and the Bureau can only reply by recommending certain publications give methods which the Bureau considers satisfactory and accurate. Manifestly, it is not possible for the Directing Committee to give any very valuable information unless it is furnished by the Hydrographic Offices, as the Directing Committee is merely their representative, so this is an attempt to ask for such information as will enable the subject to be taken up in a satisfactory manner by the Directing Committee, with a view to aiding those countries which need information.

The Secretary General. — May I add that the Bureau also received a very interesting report on a test made in the Netherlands on the subject of Surveying by Aerial Photographs. This was particularly interesting to those who have had experience of Surveying in what you might call wild or uncivilized countries where few fixed marks exist and thick bush is the rule.

Admiral Niblack (Director of the I. H. P.). — The Hydrographic Office of Italy has also sent in very valuable information. My remark was merely to stimulate other hydrographic offices to send in useful reports to the Directing Committee.

The President. — The Conference is informed that the United States Hydrographic Office has been surveying through photography. Its efforts have

now about ceased to be experimental after two complete and satisfactory seasons. Those experiences include those suggested by the Secretary General namely on the North coast of South America and very soon after my return to Washington the Bureau may expect a report which may be found of interest.

M. Fichot (France). — I desire to make known that, for some five or six years, the French Hydrographic Service has regularly employed photographs taken from aircraft for making surveys both on the coasts of France and in the colonies. Our Service has, therefore, great experience in these methods and it will be pleased to provide all possible information to those other Services which honour it by asking for information.

Captain Douglas (Great Britain). — So far as the British Empire is concerned, there has been a great deal of surveying done by aircraft over the land, and very useful reports are now in print and are being considered by the Air Survey Committee of Great Britain, on which the Hydrographer of the British Navy is represented.

As regards the hydrographical work of aircraft, however, this is still very much in the experimental stage, and, of course, in waters round the British Isles it will be readily understood that to photograph sandbanks or wrecks or anything like that, is extremely difficult owing to muddy water conditions, *etc.*

With regard to the actual paragraph which we are now remarking on, "*Aircraft for Surveying*", I just wish to add that, as regards the Chinese proposal, the Bureau's comment is fully agreed with.

The President. — There are then two proposals to be considered. First the Bureau's proposal which has been read. Are there any objections to its adoption as a Resolution of this Conference?

(*Adopted*).

We now come to the Chinese Government's proposal "that an agreement be arrived at among States Members, with the provision that no air survey for hydrographic purposes be conducted outside their respective national boundaries".

The question is upon the adoption of the proposal from China.

In view of the agreements already expressed with the views of the Bureau on this subject a vote is considered necessary.

Admiral Niblack (Director of the I. H. B.). — It will be noted that this proposal binds Governments to make no Air Surveys for hydrographic purposes outside their respective national boundaries. That would limit, for instance, the United States in the work of which Captain Crosley has just spoken, in its surveys being made on the coast of Venezuela at the request of the Venezuelan Government. It would prevent any country from doing what we are proposing in No 3: "*Initiating Surveys of Coasts Insufficiently Surveyed*". I think the wording of the Chinese proposal is unfortunate, in that it seeks to limit the use of Aircraft for Surveying for hydrographic purposes outside the respective national boundaries, whereas the intention is evidently that this should not be done *without the consent of the Governments concerned*. I think if there is any question of the Resolution being adopted there should be added "*without the consent of the countries concerned*".

Captain Scheweppe (Germany). — I agree with the Honourable Delegate of Great Britain. I am of the same opinion as the Bureau when it says it "cannot see its way to recommend the acceptance of the Chinese proposal".

The President. — It has been moved and seconded twice that the Chinese proposal be rejected. Are you ready for the question?

M. Butavand (Monaco). — I share the opinion of the honourable Delegate of Great Britain. It is not possible to accept the proposal of the Chinese

Government, the object of which is to forbid States to make air surveys outside their territorial waters. This entails that no one would have the right to make air surveys of the seas which belong to no country. Such surveys are very useful for finding wrecks or shoals of fish which are of interest to international fisheries.

Therefore I cannot support the proposal of the Chinese Government.

Lieutenant-Commander Chen (China). — Mr. President, this proposal refers only to the territories of the countries in question, seas outside those territories should be considered as free. Some States have not a sufficient Hydrographic Service and in that case collaboration between States becomes necessary, but the consent of the State which is master of the coast should always be obtained.

Admiral Niblack (Director of the I. H. B.). — I think from this point of view that the subject should be one rather for the League of Nations.

The President. — I might say that the United States Hydrographic Office has had no difficulty in obtaining permission, from States which lack hydrographic surveying facilities, to make these surveys and, as all must know the shores of the Caribbean Sea are important and the United States Office has been and is surveying coasts of other Nations with their approval, which is not difficult to obtain.

Captain Fablet (Argentine). — Having heard the explanations made by the Chinese Delegate and having read the Comment of the Bureau, I note that there is no great difference between the proposal of the Chinese Government and the Comment of the Bureau. Perhaps agreement might be reached by adding the words "without the permission of the Government" at the end of the Chinese proposal.

The President. — The question is upon the rejection of the Chinese proposal as it stands. That has been moved and seconded three times.

(A vote is taken).

The proposal is rejected.

Is it desired to accept a similar proposal with a change?

Admiral Niblack (Director of the I. H. B.). — I should think that would be a dangerous proposition because hydrographic work is undertaken for all kinds of reasons. There might arise an occasion when under an international agreement between a number of countries, you might want to survey a country without its consent because it was recalcitrant in some way. It seems to me it is a question for the League of Nations and not for this Conference.

The President. — Are there any other comments on this proposition?

M. Butavand (Monaco). — The consequence of the explanation made by the Delegate of China on the subject of his proposal is that the first paragraph of the Comment of the Bureau and the intentions of the Chinese Delegation are almost identical; thus the Chinese text, amended, would express international usage which is stated and invoked by the Bureau. Thus, it appears that the Comment of the Bureau should satisfy the Chinese Delegation. I propose, therefore, that we maintain the Bureau's text.

The President. — The Chair requests consideration of the next article:

SOUNDING BY SWEEPING AND BY ECHO.

The Bureau proposes:

"that those nations which apply sounding by sweeping or by echo and have not yet sent reports or publications on these subjects to the Bureau should do so."

Attention is invited to the Comment of the Bureau.

Admiral Niblack (Director of the I. H. B.). — I should like to say a little in explanation. One of the first things I did in coming to the Bureau was to prepare a catalogue of those firms which sold hydrographic instruments approved by Hydrographic Offices in general and I was very much surprised at the little interest shown in the matter, but it occurred to me that we should nevertheless get all the information we could. With regard to echo-sounding, therefore, we endeavoured not only to get information concerning the results obtained with the instruments used, but also the price and the place at which they were manufactured, as these instruments offer possibilities for surveying and even for navigation. The Bureau has, however, obtained somewhat limited results and will be glad to have supplementary information.

Captain Douglas (Great Britain). — Mr. President, as regards the methods used for echo-sounding by Great Britain, I may say that it is now a commercial proposition and we have been to some pains and trouble to obtain information from the firm of Hughes, which is making the apparatus. There is no doubt that the whole of the information concerning this apparatus will be forwarded to the Bureau in a very short time, because the book is likely to be published very shortly. Of course, this is in accordance with the Resolution already passed, which is that any information on this subject should be sent in by the various States Members.

Captain Schweppe (Germany). — The German Hydrographic Office has sent some reports about these methods to the Hydrographic Bureau and other similar reports will be sent. We did not know until now that the Bureau was interested in the question of price and so on, but it will be simple to add this also.

Captain Douglas (Great Britain). — I second the proposal.

The President. — The question is upon the adoption of the proposal of the Bureau; those in favour please raise their hands.

(Adopted).

Please consider:

INITIATING SURVEYS OF COASTS INSUFFICIENTLY SURVEYED.

Admiral Niblack (Director of the I. H. B.). — The discussion which took place on aircraft for surveying can apply to the difficult question which is here proposed. The Charts Section of the Bureau has prepared, with the help of existing charts and other sources of information, a series of charts, on which areas completely surveyed are indicated in red, areas partially surveyed in blue, areas superficially examined in yellow. These charts are available for the inspection of Delegates. I should like to point out, however, that they do not indicate the difficulties which the Bureau would encounter if it attempted to initiate aerial surveys in areas insufficiently surveyed because of the question of the expense. It is rather a delicate matter to propose to anyone to spend a lot of money.

The question therefore resolves itself into the rather tactful one of furnishing information, and the Bureau is of opinion that its function is to furnish information of a hydrographic character that will stimulate further interest and to furnish information for any Conference which may be suddenly called on any question relating to Hydrography. It is a fortunate circumstance that out of 350 international organisations only about 5 concern themselves with maritime matters, for I do not hesitate to say that international Conferences in general meet improperly prepared as to information, act without studying questions satisfactorily, and, on adjourning, relegate much matter to the secretariat of their organization. They often pass resolutions which conflict absolutely with international agreements already reached, and they do not hesitate to consider subjects which properly belong to other interested organizations.

One of the main things for the Bureau to do is to publish maritime information. No action can be intelligently taken by an international gathering without information, and the solution must come through an intelligent appreciation by governments of the needs of the world, from a commercial and maritime point of view, and the Bureau will best serve such purposes by publishing information. People do not realize how little the world has been surveyed; they do not realize how much work there is to be done, and they are only too often ready to allow the work to be done by somebody else.

The President. — The Chair invites attention to the fact that the proposal as printed is incomplete. The intention was to request the Bureau to explore the avenues possible for initiating surveys, and those who make the proposal would under no circumstances, unless asked, suggest to the Bureau how to do this. Unless there is opposition, that proposal will be completed:

“.....to invite the Bureau to explore the avenues for initiating coast surveys in those countries whose coasts are insufficiently surveyed...”

Unless there are objections, this, being known to be the original proposal, will be adopted as the proposal.

Lieutenant-Commander Chen (China). — I have already had occasion to explain my point of view on the subject of coast survey, and am of opinion that such surveys ought not to be made without the consent of the Governments interested, that is to say the sovereignty of the States is in question. If it be considered necessary to undertake aerial surveys, therefore, I think it would be necessary to obtain the consent of the Governments interested. With reference to the second paragraph of Article 13 of the Statutes, I understand it applies only to nations which control such portions of the coasts to be surveyed. It reads as follows: “It will do its best to cause such questions to be solved or such work to be executed by obtaining the necessary collaborations between the interested States”. That collaboration necessarily exists where a State has a Hydrographic Office competent to deal with such questions, but where there is none, the consent of other States ought first to be obtained.

Admiral Niblack (Director of the I. H. B.). — I should like to mention two things which seem to me to be important. One is that the Chinese Delegate has called attention to Articles 13 and 14, which show that the subject has been fully covered already by the Statutes. The second is that, unfortunately, the extent of the Chinese surveys was not taken into account when these charts were prepared, because they have only just been received.

Captain Luymes (Netherlands). — In my opinion, the American proposal could induce future Conferences to discuss the progress of Hydrography over the whole world on the basis of the charts prepared by the Bureau and on the information which the Delegates can furnish. These discussions may lead to some decisions by the Conference which may have the effect of stimulating some progress, which does not always depend only upon the good will of the Hydrographers.

In my opinion, Articles 13 and 14 of the Statutes as they stand now should be maintained.

The criticism of the charting of the Eastern part of the East Indian Archipelago by the Japanese Delegation at the London Conference being recalled, I must take this opportunity, as one of the Dutch Delegates at this Conference, of declaring that I was disagreeably impressed by that criticism. But I also at that time, lacked a sense of co-operation. During the past years I have learnt to realise that co-operation cannot be effected if we reject criticism on matters which we considered exclusively our own business before the International Conferences and before the establishing of the International Hydrographic Bureau. Such criticism, of course, must be tactful and bene-

volent and be meant to promote hydrographic interests. I have no doubt that the Japanese proposal in 1919 was intended to be such.

Captain Hori (Japan). — The Japanese Delegation thanks the Representative of the Netherlands for the kind speech which he has made with reference to the incident which appears to have occurred during the discussions at the London Conference. The Japanese Delegation was entirely unaware of any such incident which did not appear in the Report of Proceedings of that Conference. It was much astonished to find it mentioned in a passage which appears in the document drawn up by the Bureau.

It desires to state here, once again, that the Delegates of Japan to the London Conference never intended to criticise the Authorities of other States and thus fail in international courtesy.

The Japanese Delegation hopes that, from now on, this question will be considered as definitely closed.

The Conference here adjourned for 10 minutes.

The President. — The question is upon the proposal to invite the Bureau to encourage the initiating of coast surveys in those countries whose coasts are insufficiently surveyed. Admiral Niblack wishes to make a statement in connection with these charts.

Admiral Niblack (Director of the I. H. B.). — I merely wish to say that there seems to be some perturbation in the minds of some Delegates regarding the proposal to publish these charts. The information is not yet complete, but it would seem to me that it would be better to publish the charts, even though somewhat inaccurate, than to delay publication because the country affected has no better ones. Hydrographers can use any information they obtain with regard to other countries in this way as an argument to get more money to speed up their own surveys. In other words, information is the basis of action, and as we got the best information available at the time, even if it is not altogether correct, subsequent corrections will make it accurate.

The President. — Are there any objections to the adoption by the Conference of this as a Resolution?

(Adopted).

Your attention is invited to the fourth item in the "Supplement to Proposals made".

INFORMATION NECESSARY FOR WORK UNDER ARTICLE 9 OF THE STATUTES.

The Bureau proposes that:

"The Representatives of the States Members should be prepared to provide the Bureau with all necessary information for which it may ask in order to enable the Directors to undertake the principal work of the Bureau as enumerated in Article 9 of the Statutes".

The explanatory note mentions the work to be undertaken as laid down in the Statutes.

The Chair is of the opinion that this matter has already been covered.

Admiral Niblack (Director of the I. H. B.). — Mr. President, as a matter of fact this has not been discussed by the Conference because the proposals of the Delegation of Japan were withdrawn and were therefore not considered. The Bureau finds at times considerable difficulty in getting certain necessary information on which to base intelligent action, not only by the Bureau, but by the Members themselves. There was discussed in the London Conference the question of what should go in the Light Lists and what information should go under Sailing Directions, etc. Probably that question has been considered by the Committee on Charts, and it may therefore come up, but it may not. There has been, however, a distinct proposal made by the Bureau on several occasions with regard to the publication in one volume of

information which is of the utmost importance to mariners and which cannot be given and is not given in detail in Light Lists nor in any general publication. I have in mind also the important question of life saving.

It may be that this Conference on Hydrography does not concern itself with safety of life at sea and life-saving at sea, but there is nowhere a conveniently given list of life-saving stations and appliances, for instance, which the different countries have provided for the benefit of mariners, some of which stations are maintained by Governments and some, one might say, by charity. There is a mass of information valuable to the mariner, which could be assembled in some form as to be of the utmost use to shipping. The Bureau has had in mind a proposal to this Conference to gather all the information available in the Bureau into one volume for the benefit of mariners, instead of scattered as it now is in several books, — so that, also, if any question should arise at any maritime conference, it would be an easy matter to refer to the data compiled therein. The proposal under consideration is made in order to prevent any resentment which some Offices might feel on being asked for information which they may not consider important, but which other Offices may regard as of the utmost importance.

I wish to point out that the status of the Bureau has become, through the Bureau's connection with the League of Nations, more important than was anticipated, and international Conferences now look to us, as far as permitted by the Statutes, to advise them in maritime matters such as safety of life at sea and life-saving at sea, as far as concerns providing data. The proposal has to do with asking all the Representatives of States Members to be prepared to help the Bureau in fulfilling certain duties of an international character which have come to it by virtue of its association with the League of Nations and by the fact that international conferences do actually request it to give them information.

Captain Schweppe (Germany). — In Germany all the data of which Admiral Niblack has spoken are in the Sailing Directions. I do not think that such information should be suppressed in the Sailing Directions and collected in a new publication.

The President. — The Chair invites the attention of the Conference to Article 13 of the Statutes (1923 edition)

There appears to be ample instruction for the Bureau to do what it is asked to do by any organization of standing. The Chair takes the liberty of suggesting that if we make a mental reservation and read the first line of the Bureau's proposal as follows, it might help:

"The Representatives of the States Members should be mentally prepared to provide..."

It is not necessary to insert the word "mentally". Everybody knows that probably no Hydrographer can immediately be prepared to furnish information requested, but he probably can get it from his Government in reasonable time. If, instead of "prepared" we read "mentally disposed", it is the same thing. The idea is that Members are requested by the Bureau to be sympathetic. I hope I am correct in believing that after this Conference, no further suggestion will be necessary.

Admiral Niblack (Director of the I. H. B.). — Regarding Captain Schweppe's observation, he makes the exact point which the Bureau is trying to make. The information with regard to the German coasts is absolutely complete, but so is the information given by certain other countries in their Sailing Directions. I would like to praise very highly the Handbook or Sailing Directions of Germany, as I have utilized them. But the proposal is to have information of a broader character for all other countries, especially non-European countries, for which the information is rather meagre, and that there shall be assembled in one volume all information which will be valuable to the

captain, to the man in the tramp steamer, to the man who finds himself in a part of the world with which he is altogether unfamiliar. We can best promote safety of life at sea and safety of navigation by providing such information in one volume. The proposal of the Bureau is that information scattered through all the Sailing Directions of the world shall take on an international character and include all the matter now in the Sailing Directions of each particular country.

Commodore Reinius. (Sweden). — I fully agree with the proposal of the Bureau, and I trust to the judgment of the Directing Committee.

The President. — Are there any objections to the adoption by this Conference of the proposal as a resolution ?

(Adopted).

The Chair is unable to find further hydrographic subjects to discuss. Does any Member wish to bring up a subject ?

Beginning by disabusing any who fear that the Chair proposes to sing, he finds that a sort of "swan song" is necessary. He wishes to thank individually and collectively all Members and personnel with whom he has been associated for their kind consideration, their able assistance and their whole-hearted work. To name any concerned would make it necessary for me to name all, and I will not take up your time doing that. Please believe that there are no exceptions.

In addition to the honour I have felt in presiding, I consider it a very great privilege to have presided over so many fine men. Please believe that I will always be glad to meet in any part of the world, and particularly in my own home, all with whom I have become acquainted here.

(Applause).

Is there any further business ?

VACANCY IN THE DIRECTING COMMITTEE.

Admiral Niblack (Director of the I. H. B.). — May I make a proposal? There is still an administrative question to liquidate, in the matter of filling the existing vacancy on the Directing Committee. Automatically M. de Vanssay has the right to take the vacant place at his earliest convenience. I will merely ask that it may be left to M. de Vanssay and Captain Tonta to come to an agreement between themselves as to who should take the place if one or the other, for some good reason, is not able to do so before the 1st March. I do not think the Bureau has the right to go beyond the fact that M. de Vanssay should fill the vacancy in the first place, but if for some reason he does not feel that he is available, it might fall to Captain Tonta. I ask therefore that it be left in the hands of the Directing Committee to accept whichever Member presents himself. Is the Conference willing to let the matter rest there or is a Resolution necessary ?

The President. — The Chair takes the liberty of suggesting that this Conference now pass a Resolution to the effect that it is its wish that the Directing Committee of the Bureau take immediate steps to fill its quota of Directors in the best way it can find.

Captain Schweppe (Germany). — I support it.

The President. — Are there any objections ?

(Adopted).

Are there other Members who wish to speak ?

CLOSURE OF THE CONFERENCE

Captain Luymes (Netherlands). — I believe that I am speaking in the name of everyone here if I say that we thank you, Mr. President, most heartily for the manner in which you have presided over our Conference. Owing

to the regretted illness of Admiral Phaff, you were unexpectedly placed before this task of presidency which you had not anticipated at the beginning of the Conference. Allow me to say that you have filled it admirably, and my only regret is this, that owing to your duties as President, we have had very much less of you in the Committees than we might otherwise have had.

(Applause).

The President. — The Chair is glad to accept the applause, which appears to be unanimous, as a general expression of opinion and thanks you accordingly.

Captain Schweppe (Germany). — I am sure that the whole Conference is with me when I ask the Bureau to express our kind and hearty wishes to Admiral Phaff for a speedy and complete recovery.

(Applause).

The President. — *Adopted.*

Captain Caballero y Lastres (Peru). — I propose that the Conference should express its thanks to the Government of the Principality for its kind hospitality. Perhaps we might invite M. Butavand, the Delegate of Monaco, to convey these thanks.

(This proposal was received with applause by the Conference).

M. Butavand (Monaco). — I thank the Delegate of Peru for the kind motion which he has just put forward. I will not fail to convey these thanks to my Colleagues in the Princely Government, of which I have the honour to form part, and the Government will inform its Sovereign of the speech made here and of the kind reception which it met from those present. His Serene Highness will be much affected thereby.

We hope sincerely that, during the next Conference which will be held in the Principality, the weather will be somewhat more favourable than it has been recently. This is the country of the sun, and Monaco, by its situation on the coast, is like a brilliant light which attracts the whole world on account of both its warm climate and its natural charms; the sun, had it been less shy, would have shown up these charms and the Delegates, who came to this Conference from the ends of the earth, would have been able to appreciate them fully. I like to think that, in spite of this, you will not carry away with you a very unfavourable impression of the Principality and that, at the next Conference, the Sun will attend.

(Applause).

Lieutenant-Commander Chordasitch (Kingdom of the Serbs, Croats and Slovenes). — As a Representative of a State non-Member of the Bureau I ask to be allowed to say a few words in order to express my hearty thanks for the very kind reception given to me and for the most valuable information I have been able to obtain at this Conference.

The President. — The President takes pleasure in assuring the last speaker that the entire Conference is very glad he was able to be here and to represent his country.

Members are requested to remove from the tables, at which they are sitting, everything of value to them before leaving, as the tables will disappear almost immediately.

Commander Spicer-Simson (Secretary General). — It has not been possible — seeing that the greater amount of my staff at the Bureau has been employed on Conference work — to enter all the corrections to the Minutes of Proceedings in what I call my “standard-copy”. Also, some of the Minutes of Proceedings have not yet been distributed, so naturally Delegates have had no opportunity to correct these. I should be very much obliged if all Delegates would send to me such corrections as they wish to have made

and, with the approval of the Directing Committee — I think I have it — I propose to proceed in this manner in issuing the Report of the Proceedings of this Conference, that is, of course, as soon as we have received all the corrections, and incidentally the Report of the Charts Committee in its definite form, I propose to have the Report printed and, while it is still in proof form, to send copies to all Nations here represented, or who have been represented, together with a request that they correct them. (Spelling mistakes need not be corrected, only sentiments and expressions of opinion).

I would ask to have them returned *as soon as possible* to the Bureau; the Bureau will collate all such corrections and, from this corrected proof, will issue the Report of the Proceedings.

The President. — The Chair proposes a unanimous vote of confidence and approval in the programme just outlined.

(*Adopted*).

Are there other comments?

The Chair declares this Conference adjourned.

The Conference rose at 1145.

PART III.

REPORTS OF THE MEETINGS OF THE COMMITTEES OF THE SECOND INTERNATIONAL HYDROGRAPHIC CONFERENCE

A.

MEETINGS OF THE COMMITTEE ON STATUTES.

LIST OF THE MEMBERS OF THE COMMITTEE

Chairman : Captain E. Björset.

Vice-Chairman : Captain Schweppe.

Baldi, Commander -	-	-	-	-	-	Italy.
Bayram, Mahmoud Bey	-	-	-	-	-	Egypt.
Björset, Captain	-	-	-	-	-	Norway.
Brandon, Commander	-	-	-	-	-	Great Britain.
de Buen, Professor O.	-	-	-	-	-	Spain.
Fablet, Captain	-	-	-	-	-	Argentina.
Fichot, Ingénieur Hydrographe Général	-	-	-	-	-	France.
Gallépe, Monsieur	-	-	-	-	-	Monaco.
Gerken, Commander	-	-	-	-	-	Chile.
Klossowski, Lieutenant	-	-	-	-	-	Poland.
Lopes, Lieutenant-Commander	-	-	-	-	-	Portugal.
Luymes, Captain	-	-	-	-	-	Netherlands.
Rasikotsicas, Commander	-	-	-	-	-	Greece.
Reinius, Commodore	-	-	-	-	-	Sweden.
Sampaio, Captain	-	-	-	-	-	Brazil.
Schweppe, Captain	-	-	-	-	-	Germany.

Secretary,
Lieutenant G. ALBERT (I. H. B.).

RESOLUTIONS PROPOSED BY THE COMMITTEE : Page 307.

RESOLUTIONS ADOPTED BY THE CONFERENCE : Part I, E, page 93.

CHAPTER I.

The first Meeting of the Committee was held at 0930, on Thursday, 28th October 1926.

The Chairman. — As Chairman of this Committee I have the honour to wish you all a hearty welcome. I feel sure that we shall obtain good results from our labours, although the only reason I have for making such a statement is that I know that I shall be supported in my task by your good will. The results ought to be good, for we are all sailors and I feel convinced that you will aid me in the discussions. (*Applause*).

I have promised Mr. Harada, the Representative of the League of Nations, that we will discuss as soon as possible some points he wishes to raise ; he is leaving tonight and that is why first of all we will discuss these points which are connected with the League of Nations.

Mr. Harada (League of Nations). — Mr. Chairman, first I want to thank you most heartily for having arranged to take early in your deliberations these questions which concern, either directly or indirectly, the League of Nations. I have just had word from Geneva that I am needed there on business and therefore I have to leave tonight ; however I shall try to come back later.

There are several points in connection with the revision of the Statutes which interest the League of Nations and therefore I should like to put before you certain facts for your information.

SUBJECTS RELATING TO THE REGULATIONS OF THE LEAGUE OF NATIONS. LEAVE & MONETARY STANDARD.

First of all the Bureau has suggested a modification to Art. 22 ; this modification reads as follows :

Art. 22 (vi). — “ A Director having been incapacitated for duty in any consecutive twelve months, shall receive full pay for six months and half-pay for six months and automatically cease to be a Member of the Directing Committee at the expiration of the twelve months ”.

Then comes the Explanatory Note and Para. (vii) which I will read :

Explanatory Note.

It seems to be necessary to establish a term for sick leave, more or less conformable to the rules of the League of Nations.

Insert new paragraph :

(vii). In every three years of service each Director is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home shall be refunded to him.

Explanatory Note.

In accordance with the regulations of the League of Nations, this leave is proposed for the Directors in order to allow those who belong to far distant countries to go home at least once during the time they hold their office ”.

I support this proposal because it is on the same lines as the League policy. I have, however, brought a copy of the Staff Regulations, so that the I. H. B. may see the exact details of the policy followed by the League.

So much for that point. In the second place I should like to draw your attention to Paragraph 6, concerning the monetary standard of the Bureau, which reads as follows : —

6. "The effect of this will be to make all contributions of the States Members payable in Swiss francs, and the salaries of the Directors and the Secretary General will be based on the same currency, as has been the case up to now, and, though this currency is perhaps not absolutely stable with reference to gold, it is sufficiently so for all practical purposes and it is known and quoted throughout the world. The Swiss franc has, on an average, been quoted at about 90 % of the value adopted by the League of Nations for the gold franc, and thus, if the proposal of the Committee is adopted, the increase in the above-mentioned contributions and salaries suggested by the Auditor will not be necessary".

This is a rather complicated question, namely that of the monetary system to be used by the Bureau. I suppose you are all aware of the complications and difficulty caused by the misunderstanding of the term "gold franc". From a long Memorandum prepared by the Bureau and explaining what happened during the last few years it appears that the proposal is to adopt the gold franc as a monetary unit.

The Chairman. — Not the Swiss gold franc.

Mr. Harada (League of Nations). — Para. 6 says 'Swiss francs', that of course means paper francs and the paper franc is now said to be lower than the gold franc by 10 per cent. As a matter of fact such a statement is not correct: the Swiss franc is now above par, and if the Swiss paper system which has been used so far is abolished there will be no complication or difficulty, no increase to pay.

Another point: the gold franc system is a fictitious one, an imaginary monetary unit, as it were; no gold franc really exists in currency, and therefore in paying the contributions of the various countries you have to convert this gold franc into some ordinary currency, and at the present moment the American dollar is the nearest to par of the gold franc. If, therefore, you adopt the gold franc standard it will mean that you will pay in American dollars. That is what the League of Nations is now doing. All the States Members of the League pay their subscriptions to the League in American dollars.

The Chairman. — Do you mean that in your opinion it is advisable to use the American dollar?

Mr. Harada (League of Nations). — No, but to adopt the gold franc system. There is an error in this paragraph and the currency nearest to the theoretical standard is the American dollar, and the League of Nations bases its subscriptions on the American dollar.

Then there is another proposal which has been made by the I. H. B. It is an addition to Art. 50 and reads as follows:

"Art. 50. Insert: first line, between 'Members' and 'and': 'a Representative of the League of Nations.'"

I should like to suggest instead of 'a Representative', the plural form 'Representatives' and to add 'in an advisory capacity'. The League of Nations is not a member of the Bureau and is only here in a consultative capacity and to give you any information you may need in connection with the activities of the League.

Commander Rasikotsicas (Greece). — Is it only in an advisory capacity that the League of Nations is represented?

Mr. Harada (League of Nations). — Yes.

The Chairman. — I think we must now discuss the first proposals of the Directing Committee.

SICK LEAVE & TRIENNIAL LEAVE OF DIRECTORS.

Art. 22. — Insert new paragraph :

(vi). " A Director having been incapacitated for duty, in any consecutive twelve months, shall receive full pay for six months and half-pay for six months and automatically cease to be a member of the Directing Committee at the expiration of the twelve months ".

Explanatory Note.

It seems to be necessary to establish a term for sick leave, more or less conformable to the rules of the League of Nations.

Insert new paragraph :

(vii). " In every three years of service each Director is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him. "

Explanatory Note.

" In accordance with the regulations of the League of Nations, this leave is proposed for the Directors in order to allow those who belong to far distant countries to go home at least once during the time they hold their office ".

Commander Rasikotsicas (Greece). — Please read the passage in the League of Nations Regulations which corresponds with this proposal.

Mr. Harada (League of Nations) :

" In the case of international officials whose appointment has been finally confirmed, the amount of sick leave to the allowed shall not exceed an aggregate of eighteen months in any four consecutive years, of which the first nine months shall be on full pay and the remainder on half pay, but subject to the provisions that after six months' continuous leave on full pay have been granted, sick leave for the remainder of the same illness will ordinarily be on half pay, and that not more than six month's sick leave on full pay will ordinarily be granted in respect of different illnesses in any twelve consecutive months ".

M. Fichot (France). — Would it not be possible to have the official French text ?

(The text was sent for).

Captain Schweppe (Germany). — I should like to make a proposal on this question but should like to make it in German, as I find it difficult to express myself in any other language. *(Continuing in German).* I should like to suggest that the Members of the Directing Committee of the Bureau will have thoroughly considered these Amendments to the Statutes before laying them before you and further, that the Staff Regulations of the League of Nations are perhaps rather too detailed for a smaller organisation such as our own. Might we not therefore adopt the text of the Bureau which is before us, as it takes into account the needs of the I. H. B. by not giving too extensive leave to the personnel, and it also takes into account the needs of the Directors who ought legitimately to be able to claim leave from time to time.

Commander Brandon (Great Britain). — I support that proposal.

Commander Rasikotsicas (Greece). — I also support it.

M. Fichot (France). — I agree that our text should be simple and yet comprehensive, but before making a definite statement, I should like to read the French official text of the League of Nations Regulation. The League of Nations provision appears somewhat too detailed for us, but in principle I should not wish to see our Statutes inferior to those of the League.

Mahmoud Bey Bayram (Egypt). — I am of the same opinion; why have a text which is unnecessarily complicated?

The Chairman. — Are there any further objections?

Captain Fablet (Argentine). — I think the discussion should be closed and perhaps M. Fichot would make his proposal and we could then vote on it.

M. Fichot (France). — I have no new proposal to make; I think our text is simpler.

Commander Brandon (Great Britain). — Mr. Chairman, may I suggest that we consider these proposals in due course as we arrive at them, and work through them, then M. Fichot will have time to formulate any small modifications that may occur to him. Meanwhile we thank Mr. Harada for giving us these clear explanations and will proceed with the business of taking the Statutes through from the beginning.

The Chairman. — Our reason for taking them in this way was that Mr. Harada has to leave us to-night.

Mr. Harada (League of Nations). — It was my intention to give information only and therefore it is for you to decide. As Captain Schweppe says, the League of Nations Regulations are more complicated and this is because we have a very numerous staff at Geneva: 500 on the staff of the League of Nations and 400 at the International Labour Office. I certainly did not intend to complicate matters for the I. H. B., but merely wanted to explain how we did things at the League. Obviously the I. H. B. will wish to adopt a simpler plan.

M. Fichot (France). — After reading through the French text of the League Staff Regulations, I see that there is really very little difference between the two texts, so that I have no new proposal to make.

The Chairman. — I think that closes the discussion. But it is necessary to begin now the ordinary discussion. We shall do what we can to meet Mr. Harada's suggestions, for we agree with him in reality. Has anyone anything to propose with respect to new para. (vi). My opinion is that we can adopt this text.

Commander Rasikotsicas (Greece). — I agree.

The Chairman. — Any objections or other proposals?

Commander Gerken (Chili). — It seems to me there is a difficulty here. If there are only three Directors and one of them is ill for twelve consecutive months, the work of the other two will be very hard, I think the time — twelve months — is too long.

Captain Schweppe (Germany) (*speaking in German*). — I think that the Directors took all that into consideration before formulating the proposals. If a Director has been on duty for four years and has done his work faithfully then it appears to me to be very unjust if, after so short a time, he should be replaced by a new Director. After all we must not forget that sometimes the Directors come from far-off countries and bring their families with them, and it would not be fair to them to let them go so quickly; the Bureau owes them some gratitude for their work and is in a position to stand the expenses of one year's absence from the Bureau.

The Chairman. — Has anyone anything to suggest?

M. Fichot (France). — Captain Schweppe's contention is justifiable and I certainly think we owe gratitude to those who have worked for the Bureau.

I would suggest that in such a case as that put forward by Captain Schweppe we should extend the four years to five, as in any case the Bureau is renewed every five years. Perhaps Captain Schweppe would draft an Article that might cover this point.

Captain Schweppe (Germany). — It is rather difficult for me to accede to M. Fichot's suggestion. I think we would have to leave that to the President and to the Directors, they could more easily come to a satisfactory conclusion. It is very hard to lay down a rule that will be applicable to all the possible cases that may arise and, as the Conference meets every five years, it will then have an opportunity of criticising any arrangements made by the Directors. I do not believe in hard and fast rules, if however anyone has a proposal to make on the subject it might be well to hear it.

The Chairman. — Perhaps, Commander Gerken, there is not too great a risk in adopting this text. It is obvious that protracted absence on the part of one of the Directors will increase the work of the remaining two, but the Bureau can afford to have a substitute for the time being.

Commander Gerken (Chili). — My intention was but to suggest that if the Director was ill for such a period as that mentioned, he should be replaced after six months in order to prevent overwork for the remaining two. I was not taking into account the question of pay, not did I mean to imply that the salary of the one who was ill should be cut down.

Commander Brandon (Great Britain). — The two Directors who are responsible for this proposal have been through precisely such a case as is foreseen here and they must know what was the burden of work which fell on their shoulders, yet they agreed to the same arrangement in another case; the two Directors carried on without any substitute, and I think that we can confidently accept the proposal. It is most unlikely, and we hope such a case will not occur again, but the two present Directors have had their experience and, as this proposal is based on that experience, I think we might accept it.

The Chairman. — Are there any further suggestions? None, Well then, in that case we can adopt the proposed text for Para. vi and Para. vii.

The text is adopted.

ADOPTION OF THE GOLD FRANC AS THE MONETARY STANDARD FOR THE BUREAU.

The Chairman. — We now go on to Parag. 6, concerning the monetary standard.

Mr. Harada (League of Nations). — May I explain my position once more? I am here to put myself at your disposal and I will inform you as to the usages of the League of Nations. I do not want in any way to hurry you in coming to a decision, but I shall be pleased to give you information.

Captain Schweppe (Germany). — As this question is particularly complicated, you will forgive me if I prefer to express myself in German. In my opinion, it is not necessary to study the very detailed statements in the proposal, but what we want to get at is whether the salaries of the personnel of the Bureau ought to be maintained as formerly or whether they ought to be reduced. If they are to be maintained at the same scale as formerly, then we shall have to find a currency that will correspond to the old basis of salaries. I suggest therefore that we discuss the question as to whether the salaries are to be maintained or reduced.

Commander Rasikotsicas (Greece). — Has the proposal made by Captain Schweppe any reference to what Mr. Harada has put forward? I understood that the League of Nations Representative was discussing whether or not we should use the Swiss gold franc. Does Captain Schweppe's proposal also refer to this question?

The Chairman. — Captain Schweppe, if I understood him aright, wanted to say that the crux of the whole question lay in the fact that if this new system were adopted it might reduce the salaries. He thinks that we should not adopt a monetary system which would carry with it a reduction of the salaries of the Directors and the Secretary General.

M. Fichot (France). — As we are affiliated to the League of Nations, it is only logical to adopt its monetary system. The League of Nations has adopted the gold franc, that is to say the international franc. It is a fictitious money, the Swiss gold franc does not exist; the gold franc has no nationality. We must therefore now settle this question which is due to the fact that a mistake arose when the Statutes were first drafted and when we spoke of the "Swiss franc". We ought to have adopted the League of Nations standard in the first instance. Now we must try to get this settled first of all, after that we can examine the question as to whether or not the new system will effect a reduction in the salaries of the Directors. I do not think this question of the reduction of the salaries is on the Agenda, and I should not have thought that we could have discussed anything which was not on the Agenda?

M. Albert (I. H. B., Secretary to the Committee). — May I intervene? As an employée of the Bureau I think that I am in a position to clear up this question. The question of reduction of salaries has not been raised by any of the States Members, but it is mentioned in a Statement by Admiral Phaff which will be found on page 140 of the "Proposals" (page 142 of the French text) and a note by Admiral Niblack on page 148 (page 150 — French text). Now as to the monetary unit, this question was raised by Mr. Watterson, Chief Accountant of the League of Nations, who stated that the Statutes were badly drafted. The Statutes speak of a "Swiss gold franc" and this, as a matter of fact, does not exist.

Commander Brandon (Great Britain). — I should like to associate myself with the remarks of M. Fichot, especially in the light of the explanations given by M. Albert. I understand from Mr. Harada — and that is the information which the British Delegation was given by its accounting experts — that the practical effect of the change from Swiss to gold francs will not be anything appreciable, nor will the salaries be appreciably affected either, and in view of that I think we might adopt the gold franc, which is much preferred by the auditors of the League of Nations, provided, of course, that this will not throw the finances of the Bureau into confusion, and this I gather from M. Albert will not be the case.

May I just add that, as far as I am concerned, it will not be necessary to have every French speech translated into English. I believe that Commander Gerken feels the same about it. It will save time if we can dispense with it.

Commander Gerken (Chile). — I support the adoption of the gold franc standard, and I also agree to dispensing with the translations into English.

Captain Schweppe (Germany). — I withdraw my proposal and adopt Commander Brandon's.

The Chairman. — With respect to the translations into English I am ready to agree to Commander Brandon's proposal in the main, but I should be very much obliged to have some of the details translated occasionally into English.

I would like to say to M. Albert that, of course, everyone knows that we are not now discussing Admiral Phaff's suggested reduction, that is quite a different question and we must not confuse the two subjects.

M. Albert (I. H. B., Secretary to the Committee). — Yes, I understand, but I was afraid that perhaps there was a misunderstanding on this head as there is some question of reducing salaries and of suppressing the position of Secretary General.

The Chairman. — We shall come to that later on. I will now return to Captain Schweppe's proposal. What he meant was that the adoption of the gold franc should not carry with it a reduction of the Directors' salaries which are now in force.

M. Albert (I. H. B., Secretary to the Committee). — As the Swiss franc is now practically equal to the gold franc this will not make any difference.

The Chairman. — That is true, but it can make a difference up to 10 per cent. Not now, but we have to consider future possibilities.

Commander Brandon (Great Britain). — But it would mean an increase.

M. Fichot (France). — We must have a standard which is not susceptible to fluctuations, and the gold franc is the only one that is not subject to variations. That is another argument in favour of adopting it.

The Chairman. — No further objections? We adopt this then. We shall use the gold franc just as the League of Nations does. The monetary standard of the Bureau is to be the gold franc as from 1st January 1927.

Mr. Harada (League of Nations). — Will that be all right for the accounts of the Bureau?

M. Albert (I. H. B., Secretary to the Committee). — Yes. It would be difficult to make the change now but from the 1st of January it will be quite satisfactory.

Commander Rasikotsicas (Greece). — I should like to make a remark regarding the acceptance of the gold franc. I think that it should be accepted, but in any case we have an observation regarding the reduction or increase of contributions and this must be taken into consideration with the question of the Netherlands' and the United States, proposal Art. 33 (a), 34 (b), 41 and 43 (b) and the Netherlands' proposal Art. 34 (a) (iii) and (b). In accepting the gold franc I propose that we should add a note saying that this will satisfy the Dutch proposal as far as a reduction of the States Members' contributions is concerned.

M. Fichot (France). — Will the Dutch proposal be affected by the adoption of the gold franc? In any case we can adopt this proposal and then later on we can see whether it affects the Dutch proposal. Because we have adopted the gold franc as the monetary unit this does not mean that ipso facto we must accept the Dutch proposal.

Commander Rasikotsicas (Greece). — The adoption of the first proposal may mean an increase as opposed to the Dutch proposal.

M. Fichot (France). — If we had kept the Swiss franc. The Dutch proposal suggests a reduction of 10 per cent. The result may be a slight increase but as Captain Brandon and M. Albert say, this increase will be very insignificant.

M. Albert (I. H. B., Secretary to the Committee). — I can find out exactly the rate of exchange of the Swiss franc if you like.

The Chairman. — We will vote upon it. Shall the gold franc be adopted or not?

The vote was taken and the *gold franc adopted as from 1st January 1927.*

M. Albert (I. H. B., Secretary to the Committee). — That is to say that whenever the words "Swiss franc" appear they are to be replaced by the words 'gold franc'?

INVITATION OF A REPRESENTATIVE FROM THE LEAGUE OF NATIONS TO CONFERENCES.

The Chairman. — Yes. Now for Art. 50. Mr. Harada, I understand that you wish to suggest that the word "Representative" should be in the plural and you desire to add "in an advisory capacity". The French text would be "des Représentants" and "avec voix consultative".

M. Fichot (France). — Who decides as to the number of League Representatives?

Professor Odon de Buen (Spain). — I am not in entire agreement with this. Our Statutes lay down that the I. H. B. shall have relations with other organisations having similar objects and it would be of advantage to have them represented too. The Seccion de Oceanografia de la Union Internacional Geodesica y Geofisica, of which I am President, works on very similar lines and it would be useful to have societies of this kind represented.

With regard to adding the words "in an advisory capacity" that might create difficulties and it might perhaps not be opportune to change the Statutes in this way.

Captain Fablet (Argentine). — I think if I understand the question aright it is very important. I do not quite agree with the last proposal because we are here only to make rulings for mariners. If we accept the proposal made by the Spanish Delegate it seems to me that instead of this being a Hydrographic Conference it will become an academic conference at which all sorts of questions will be treated. May I continue in French? (*Continues in French*). We have a Representative of the League of Nations here because we are an international organisation, but to have any other international organisations would complicate matters.

M. Albert (I. H. B., Secretary to the Committee). — Authority was asked to invite the League of Nations.

M. Fichot (France). — Meanwhile we have links with other international organisations so that the proposal made by Professor de Buen does not absolutely preclude sending invitations to them. It would perhaps not be dangerous to discuss this question; it might even be interesting to do so. I think that the change suggested is not a very great one. Is it necessary to put the question of invitations into the Statutes? We might leave it to the Bureau and restrict invitations to organisations interested in Hydrography.

Professor Odon de Buen (Spain). — The Statutes provide for relations with hydrographic and cartographic organisations but no authority is given to the Directing Committee to invite them, and yet in reality we are in continual relations with them, here at the Bureau even, where for instance the Secretary General of the Oceanographic Organisation called to discuss questions of mutual interest with the Directing Committee. We ought to decide that the Directing Committee should be authorised to invite other Organisations.

Another reason is that our President, Admiral Phaff, was present at Rome when the Section of Physical Oceanography was constituted.

Mr. Harada (League of Nations). — I quite agree with the explanation of the Spanish Delegate, there are about 387 international Organisations at present in existence in the world and the League of Nations is anxious to be in constant touch with these, and, on the other hand the Organisations themselves are always very anxious to co-operate with the League. It is the practice of the League of Nations, if some particular problem is being discussed at the League, to invite the International Organisations concerned. Therefore, if it is the wish of the Hydrographic Conference to invite to their Conferences other bodies interested, I think that this would be entirely in accordance with the usages of the League of Nations, but it is, of course, for the Conference itself to decide what the Bureau must do. With regard to this Statute I should like just to mention that the proposal emanated from the Bureau and not from the League. The League has never asked specifically for this invitation, but, in view of the relations between the I. H. B. and the League of Nations, if you wish to make an alteration, the League proposes that the phrasing which I have put forward be adopted. If, however, as the Spanish Delegate suggests, you are going to insert some specific inter-

national organisation like the League to be invited to the international Conference, there is no need to insert the phrase proposed.

The Chairman. — I think it is difficult to come to a conclusion. It is an important question and it is getting late, if therefore there are no objections to having another sitting this afternoon we can continue the discussion then. I propose that we meet here again at 4 p. m.

This suggestion was approved.

SECOND READING OF RESOLUTIONS OF THE COMMITTEE.

Commander Gerken (Chile). — All we have approved here to-day should, I consider, be taken as approved after a first reading, before bringing it to the Plenary Session it should be approved a second time.

Commander Rasikotsicas (Greece). — That will be a great loss of time. Why open a further discussion?

The Meeting adjourned at 1145.

The Meeting was resumed at 1600.

The Chairman. — Commander Gerken said a few words this morning and did not finish. Will he please continue.

Commander Gerken (Chile). — It was only a proposal that before we send the draft to the Plenary Session we should have a second reading.

SITTINGS OF COMMITTEES.

Captain Luymes (Netherlands). — I object to the mode of procedure followed in holding the Meetings of the different Committees simultaneously. I don't think it would be possible in this manner to handle things properly. Somebody might say that I could make my objections also later on, when the subjects are treated in Plenary Session, but it is human not to come back easily to what has already been fixed in a report. The Delegation of the Netherlands has done what it can by dividing itself into two, but we cannot go further as there are only two Members, and therefore I must demand that the Committees will not sit simultaneously. We are here only once in five years, and the first thing is that we should handle things properly even if we stay here two, three or four weeks. I only heard this morning at the Charts Committee that there was also a meeting of the Statutes Committee. I am greatly interested in those things, and therefore I raised that objection. I will go further and write a letter on the subject to the President of the Conference.

The Chairman. — I understood that this question had been settled at the first meeting but I have no objection to the proposal of Captain Luymes.

It was said at the Plenary Session that it was left to the Chairmen and Vice-Chairmen to arrange the meetings. I do not think it any disadvantage that we should stay here a little longer than two weeks.

Captain Schweppe (Germany). — I agree with Captain Luymes, and will support any vote in this direction.

The Chairman. — I think many Members present do not wish to stay more than two weeks, but I think that we will put this question to the vote.

Captain Luymes (Netherlands). — If Delegates cannot stay that is not the fault of others.

Captain Fablet (Argentine). — I think that this question must be solved by the Plenary Session, and not by a Sub-Committee. A decision by sub-Committee would not be agreed to by the Members of the Conference in general.

Commander Rasikotsicas (Greece). — I request that the question be submitted to the Plenary Session.

Captain Luymes (Netherlands). — I agree absolutely but I took the first opportunity of protesting against the present procedure. I have already said that I will write a letter suggesting a meeting of the President of the Conference and the Chairmen of the Committees to-morrow morning.

The Chairman. — I am a Member of the Charts Committee also but as Chairman of this Committee I was not able to attend that Committee. I quite appreciate what Captain Luymes says. We are all Members of many Committees and when one Committee has finished its work we must go to another. That takes a long time. Well, we must refer it to the Plenary Session.

Commander Brandon (Great Britain). — I sympathise with Captain Luymes' objections, although it is not the fault either of Delegates who can stay here indefinitely or of those who cannot. I suggest that Delegates who are not able to attend a particular meeting should, whenever possible, indicate to the Chairman what are the subjects in which they are particularly interested, and they could arrange with him that no decision should be taken on these subjects until they have had an opportunity of speaking.

An arrangement of this kind was suggested in regard to the Charts Committee on the initiative of the Chinese Delegate and accepted by the Chairman, and I would suggest that some such arrangement should be come to provisionally until we are able to get the decision of the Plenary Conference; and; to meet Captain Luymes' immediate objections, perhaps we could run briefly through what was discussed and decided this morning.

M. Fichot (France). — I agree with the views of the British Delegate. The suggestion of the Netherlands Delegate is certainly logical, and it is desirable that all questions should be thoroughly examined, but I see that a proposal has already arisen to examine questions on second reading. In that case the work of the Committees would not be finished in under a fortnight and the fact must be kept in mind that in Plenary Session those Delegates who have not taken part in the discussions in Committee might bring the matter up again. In spite of the pleasure the Delegates have in each other's company they doubtless do not wish to prolong this pleasure until Christmas. I am in exactly the same position as Captain Luymes; having had the honour of being appointed Chairman of the Tides Committee, I see no chance as yet of assembling this Committee.

The Chairman. — I think this question is of great importance. Captain Luymes is one of those Delegates who have proposed many important things here, and I think we must arrive at a decision that can be dealt with in the Plenary Conference.

Captain Schweppe (Germany). — I think that the next Plenary Session will be next Tuesday, and what Captain Luymes objects to will have to be continued until then.

Captain Luymes (Netherlands). — My idea was to draw the attention of the Members to that question. We can proceed with our work and I will send this letter to the President and ask him to call a meeting of the Chairmen and Vice-Chairmen tomorrow morning.

Captain Schweppe (Germany). — That was my idea from the beginning, but I do not know if there will be sufficient time for that. We can begin at 8 o'clock in the morning and finish at 8 o'clock in the evening.

Captain Luymes (Netherlands). — Yes, we are all hydrographers and used to long hours.

The Chairman. — We will not meet before 9 o'clock.

Commander Rasikotsicas (Greece). — I propose that the discussion of the Statutes be continued, and that the question of the meetings of Committees be settled afterwards, at the end of the sitting.

NOTE. The Chairman sent the following letter :

28th October, 1926

" Sir,

" I have the honour to request that the Chair will kindly convene a Meeting of the Presidents and Vice-Presidents of the various Administrative and Technical Committees at 9.00 on the 29th October for the purpose of arranging the Meetings of the Committees at such times that the Members who are taking part in more than one such Committee will be able to take part in all of them.

" I have the honour to be,

" Sir,

" Your obedient Servant".

(Signed) : E. BJÖRSET

President

of the Statutes Committee.

The President
of the I. H. Conference.

The Chairman. — We will deal with the Statutes, page 18, Art. 50 :

INVITATION OF A REPRESENTATIVE FROM THE LEAGUE OF NATIONS TO CONFERENCES (cont.).

" The Delegates of the Members, and the Directing Committee and the Secretary General of the Bureau, shall meet in Conference, as a general rule, every five years commencing from the date of the establishment of the Bureau."

It is proposed in the " Supplement to the *Proposals* " to add in the first line between " Members " and " and ".

" a Representative (or Representatives) of the League of Nations in an advisory capacity ".

Are there any suggestions ?

Commander Brandon (Great Britain). — I would suggest the words " in a consultative capacity ". The Representatives of the League are here rather in the position of expert witnesses and, if their opinion is desired, it will be asked. My view is that they hold a watching brief for the League and they will very kindly, as Mr. Harada has done to-day, give us assistance when and where we need it.

Mr. Harada (League of Nations). — I am in agreement with the suggestion of the British Delegate. I have no preference as to the use of the words " advisory " or " consultative ". I am quite prepared to attend in a " consultative " capacity.

The Chairman. — It is very difficult to know the difference between those two adjectives " consultative " and " advisory ".

M. Albert (I. H. B., Secretary to the Committee). — There is one.

The Chairman. — It is a question of language and I should like to have something definite on the point. We have no time to discuss such small things now. Is the Meeting agreed that the word 'consultative' should be substituted ?

Commander Gerken (Chile). — I would like to ask what is the kind of advice that we can ask from the Representative of the League ?

Commander Brandon (Great Britain). — Might I say that that question is best answered by Mr. Harada's speeches this morning, which I think were exceedingly helpful. I imagine that in future we shall be very glad of the opinion of the League, especially as the financial audit of the Bureau has been entrusted to the League.

The Chairman. — As I understand, Commander Gerken means that this Bureau is a practical bureau, to work for sailors. We have nothing to do with

international policy, and I am proceeding on that basis. We are agreed on that, that it is not a matter on which we should invite the collaboration of the League of Nations; it is quite informal: but I think we should have the views of the Committee on that. Of course, it would be difficult to know, for there are so many things connected with the League.

Commander Gerken (Chile). — I thank the honourable Delegate from Great Britain for his explanation. I know we depend in many ways on the League and it is necessary to send an invitation to it. I do not understand quite why the word 'consultative' should be substituted.

Mr. Harada (League of Nations). — May I explain the word 'consultative' and also what the League is going to suggest or advise. As the Chairman rightly said, the League, of course, has nothing to do with the technical side of the International Hydrographic Bureau, and has not the slightest intention of interfering with the work of an international body which is placed under its direction. We are only anxious to help in whatever capacity we can.

Commander Brandon (Great Britain). — I am not sure whether the Delegate from Chile is now quite satisfied. I do not suggest that the word 'consultative' implies that the Representative of the League would be constantly asked for his advice or his opinion by the Bureau. I said he would give his opinion if and when it was required, and that naturally implies that it would be only on matters of administration and finance.

Commander Gerken (Chile). — I thank the honourable Delegate for Great Britain for his explanations, and I am quite in agreement.

The Chairman. — Is every one agreed? Are you satisfied, Mr. Harada?

Commander Gerken (Chile). — There is a proposal of the honourable Spanish Delegation, in close relation with the composition of the Bureau, which must be taken into consideration too.

Professor de Buen (Spain). — The proposal which I made could be considered as an addition to the text.

The Chairman. — There is no objection to that.

M. Albert (I. H. B., Secretary to the Committee). — The text to be inserted in the Statutes is in Art. 50, first line, between "Members" and "and a Representative of the League of Nations".

Mr. Harada (League of Nations). — Before leaving, I wish to thank you all, and especially the President, for your kindness in taking up these matters which are of great importance to the League. I shall report this to the Secretary General of the League of Nations on my return to Geneva. I trust that the Conference will be a great success, and I hope to return again before its close. (*Mr. Harada then left*).

INVITATIONS TO CONFERENCES.

Professor de Buen (Spain). — I propose the following addition to Art. 50: "The Directing Committee is authorized to invite to the Conference the President and Secretary of the Oceanographic Section of the International Geodetic and Geophysics Union".

Commander Gerken (Chile). — We have just spoken about the proposal of the Spanish Delegation, and I wish to suggest that it is possible to leave Art. 50 just as it is, and put in a sub-paragraph by which the Directing Committee can invite representatives of the League and of any Society which is interested to assist the Bureau.

The Chairman. — Has anybody any objection?

Captain Luymes (Netherlands). — I have no serious objection, but I believe the general tendency is to widen the sphere of work of the Bureau, and in general I am opposed to that. There are things which will certainly be discussed regarding the navigation work of the Bureau, and were it not that, in that direction, already the work of the Bureau has been extended, I should

have no objection, but I am anxious not to widen the scope of the Bureau, and I prefer to restrict it to purely Hydrographic work.

The Chairman. — This is by no means an obligation, but solely to allow the possibility of making such an invitation.

Professor de Buen (Spain). — I am entirely in agreement with the Chairman. Nevertheless, the text of Article 6 (*vis*) of the Statutes must be borne in mind, which says that the object of the Bureau is "to advance the theory and practice of the science of Hydrography", and also Article 8 of the Statutes which says:

"The Bureau shall keep itself in direct and close communication with the Hydrographic and other scientific Offices of the Members".

I think that my proposal is not an innovation, since the Bureau must have the right, but not the obligation, to invite these organisations, if it considers it useful.

Professor Tenani (Italy). — I direct attention to Article 52 (*b*) which might help to solve the question.

Commander Brandon (Great Britain). — I should like to associate myself with the remarks of Captain Luymes in this matter, and, while recognising the splendid work being done by the scientific body of which the honorable Delegate of Spain has spoken, I think it would be best to safeguard the general clause proposed by the Delegate of Chile by inserting the same sentence as appears at the end of Art. 52 (*b*): "No such proposed invitation will be despatched unless it is agreed to by at least two-thirds of the number of Members".

The Chairman. — This interesting discussion shows that it is absolutely necessary to go through the whole Statutes. That is what the President of the Conference said to me. We cannot take up single subjects here and I propose that this Committee should take every Article.

M. Fichot (France). — I consider that, if Article 56 calls for a procedure in the manner just indicated by the Chairman, we must commence by applying it. It could be done by submitting a proposal to the Conference.

Captain Schweppe (Germany). — I think it is quite impossible to go through all these Statutes, for you would not finish that by Christmas. For five years one of the most important duties of the Bureau has been, when necessary, to send to the States Members proposals to change the Statutes, and to let the States Members give their ideas on such proposals. Extracts of this correspondence are given on pages 115 to 137 of the document "Work Done by the Bureau", and we should go through all those pages to see what we can adopt.

M. Fichot (France) is in agreement.

Commander Brandon (Great Britain). — I agree.

Commander Rasikotsicas (Greece). — With reference to Article 56 (*b*), all States should, in due course, forward their proposals in preparation for the Conference. These proposals having been sent to the Conference, the Committee has not to resume the scrutiny of all the Statutes, but only those articles with which the proposals sent to them are connected.

M. Fichot (France). — And the other Members who wish to have new articles discussed, must begin by conforming with Article 56 (*b*), and get their proposals signed by at least three Delegations.

Commander Brandon (Great Britain). — May I suggest that we should go back to the motion of the honorable Delegate of Chile, with the addition, if he would see fit to accept it, which I made.

Commander Gerken (Chile). — I accept Commander Brandon's suggestion with great pleasure, and also the amendment which has been suggested by him, which will include the collaboration of scientific institutions, in accordance with the amendment I put to add a sub-paragraph.

Mahmoud Bey Bayram (Egypt). — I consider that, this article having already been adopted, it cannot be modified nor made the object of a special line. In M. Fichot's opinion, the proposal does not appear to have been presented with the requisite notice. On the other hand, the text which was decided on in the presence of the representative of the League of Nations cannot be modified.

The Committee has now before it another proposal ; that of the Delegate of Spain. I am quite disposed to accept it ; the Delegate of the League of Nations has acknowledged, however, that this proposal was entirely in conformity with the spirit of the League of Nations. Nevertheless, M. Fichot wishes to emphasize that it must be kept in mind that the independence of the Bureau with regard to similar Scientific Institutions should be safeguarded.

The French Delegate wonders if the Committee can decide immediately on this proposal. In his opinion, that is not possible, for Article 56 (b) of the Statutes states the contrary. This article says, in fact, that " no subject, which is not included in the final schedule, shall be discussed unless it is proposed by at least three of the Delegations of the Members ; the President of the Conference must be notified of the intention to introduce such subject not less than 24 hours beforehand ". The proposal in question was not presented before the opening of the Conference. It is at present supported by the Chilean Delegate and M. Fichot is quite disposed to agree with it, so that the said proposal is thus presented by three delegations, as is required by the Statutes. But, in order to conform with the Statutes, a request must be sent to the President of the Conference, giving 24 hours' notice, in order that this proposal may be discussed by the Conference.

ADOPTION AND APPLICATION OF DECISIONS MADE AT THE CONFERENCES.

The Chairman. — We must now regard Article 50 as completed ; we cannot alter it. I propose that we now go on with administration in general. On page 115 of " Proposals made ", the Netherlands propose :

" Deliberation concerning the best means of furthering that Resolutions, adopted at Hydrographic Conferences, are also carried out by those of the Associated States Members whose Delegates have not raised objections against them at the concerned Conference ".

The Netherlands say that experience has shown that several States have not carried out the resolutions approved at the London Conference.

Most Delegates present were not at the London Conference, and it is necessary to read this. Captain Luymes is quite right in that it is absolutely necessary to take care that we work in earnest, otherwise nothing could be done. The explanation includes the following sentence :

" This not only appears to show lack of confidence in the value both of Hydrographic Conferences and of the International Hydrographic Bureau itself, but it also leads to expense and loss of time by those Hydrographic Offices which have regarded themselves as bound to adopt and carry out resolutions "

I do not think it is necessary to read the rest. The records of the Bureau show many interesting discussions about that, and I think it is necessary to mention the Bureau's proposal namely that :

" The States Members should supply the Bureau with information as to which Resolutions of the London Conference have been adopted... "

Perhaps Captain Luymes has something to suggest ?

Captain Luymes (Netherlands). — As a consequence of the proposal of the Netherlands, the Bureau has already proposed to change in Art. 6 (iii) " to cause the Hydrographic Offices to adopt the resolutions " into " to urge the Hydrographic Offices... ". But both expressions involve that the Bureau should be more than passive ; it should not merely wait for information. The Bureau knows that several resolutions of the London Conference have not been ratified. The Bureau should follow these matters up and ask for reasons why

resolutions have not been ratified. The resulting correspondence would give a basis for new proposals at future Conferences.

The Chairman. — This is very important, and I should like Captain Luymes to give me those words in writing. It is very important that the Bureau should be the controlling power, and every Office should collaborate loyally.

Captain Luymes (Netherlands). — I think that the actual drafting of Art. 6 (iii) and also the new one proposed by the Bureau meet everything. The only thing necessary is that it be followed up by the Bureau.

Captain Fablet (Argentine). — I recall that Article 7 of the Statutes says that: "That Bureau shall be a consultative body only, and shall have no authority whatsoever over the Hydrographic Offices of the Members, which remain entirely independent, with complete liberty and initiative".

I wonder, therefore, in what way the Bureau can exercise an active control.

Captain Luymes (Netherlands). — I would observe that I have not used the word "control". By correspondence reasons should be asked why resolutions were not adopted, and eventually proposals should be drawn up by the Bureau for the next Conference based on that correspondence. Take the case of the symbol for wireless telegraphs. The London symbol has, as far as I know, actually only been put into use by my country. However, the proposal to change that symbol made to this Conference does not come from the Bureau, but from Great Britain.

Commander Brandon (Great Britain). — My country has adopted the wireless symbols. They are very awkward and cumbersome symbols, but we loyally adopted the resolution of the London Conference.

Commander Rasikotsicas (Greece). — I draw the attention of the Committee to Article 53 of the Statutes, which provides that Delegates taking part in Conferences should be qualified specialists, and the *one of them should be, for preference, the Head of the Hydrographic Service*. If this article were complied with, the Conference would not be obliged to have discussions such as those of to-day, because then all Delegates would be able to engage themselves in the name of the Hydrographic Service which they represent, so that the Resolutions taken by the Conference would be put into force.

I consider that this Article 53, when examined by the Committee, should be completed by an addition providing that if the Head of the Hydrographic Service, for any reason, is not able to attend the Conference in person, the Delegate replacing him should be furnished with the full authority required to deal with any questions referring to Hydrography.

Captain Schweppe (Germany). — It is quite impossible that any Delegate here can take the responsibility of adopting anything that is connected with cost; as everybody knows, the question of expense must be the affair of the responsible bodies in each country. For instance, as Technical Adviser in Hydrography in my own country, I could perhaps guarantee to adopt some method of soundings, of some technical work that would not involve expenditure, but that would be all I could do.

With regard to the use of the word "urge" in this Article 6 (iii), this would have to go to the Plenary Session, but I think we should agree to leave the word "cause".

Commander Rasikotsicas (Greece). — I thank the German Delegate for his explanation. I note that the resolutions taken by the Conference may be divided into two groups: viz, *Resolutions*, which States Members of the Bureau are bound to carry out, and *recommendations*, some of which, for instance, might entail expense and which should not be held as obligatory for the States.

Captain Schweppe (Germany). — I should be glad to speak with

Commander Rasikotsikas on the subject. It does not, perhaps, concern the matter under discussion.

The **Chairman**. — It touches upon it.

Captain Luymes (Netherlands). — I presume that what has been said by the Delegate of Greece would perhaps not have the result he thinks. My experience is that certain Heads of Hydrographic Offices adopted resolutions at the London Conference and did not carry them out afterwards.

After what has been said, I think we should have a vote on the point as to whether "urge" should be substituted.

The **Chairman**. — When I used the word "control", I think it will be understood that I meant the Bureau should do what it could to control those things. I am well aware that it has no authority over Hydrographic Offices in general. I believe, for instance, Captain Luymes said the resolutions on wireless stations had been carried out.

Captain Luymes (Netherlands). — Yes, but only by my country and, as I now hear, by Great Britain on Telegraph Charts.

The **Chairman**. — We have adopted that, in the same manner as Sweden. The text is in English and our own languages, in order that these things may be understood.

Captain Luymes (Netherlands). — The symbol.

The **Chairman**. — I think you will remember that this matter was left unfinished in London. It was referred to the Bureau for discussion.

The League of Nations is also studying this matter, and it would be preferable to wait for the result of its studies.

Captain Luymes (Netherlands). — I do not see the necessity to wait for that, as we need only decide whether "cause" should be changed into "urge". Furthermore, I remarked that the *accepted* resolution of London about this symbol was imperative.

M. Fichot (France). — I consider that it should be well understood that whenever a State is led to introduce changes, such modifications should be in conformity with the recommendations of the Bureau. On the other hand, in many cases, the Head of the Hydrographic Office himself is not free to engage himself to introduce certain modifications, he might be prevented from doing so by financial considerations. I am sure that every one agrees that the proposal of the Netherlands Delegate should be approved, because the function of the Bureau is really to hasten the execution of measures decided on by the Conference.

Commander Brandon (Great Britain). — I think that this proposal is quite harmless but also quite unnecessary. It is based on a misreading of the English text. I suggest we reject it and get on to the next subject. The Bureau would naturally not order the Offices to do anything; but it seems to me that its object should be to try to induce the Offices to adopt resolutions.

M. Albert (I. H. B., Secretary to the Committee). — I think the French text is correct.

Mahmoud Bey Bayram (Egypt). — I agree with the British Delegate.

The **Chairman**. — It is difficult for those who are not English to understand the structure of the English language, but I should not think it is necessary to alter "cause" to "urge". Is there any objection to the word "cause"?

M. Fichot (France). — I ask the Netherlands Delegate in what form his proposal could be considered, would it be as a new article for the Statutes?

Captain Luymes (Netherlands). — I only ask that it should be recorded in the proceedings that this Committee is of opinion that the Bureau should

study the charts and publications it receives in order to see if the resolutions have been carried out, and that by correspondence it should ask for reasons for not following them up, in order to collect material for the next Conference. If the Committee would agree to that we should be finished with the question.

Captain Schweppe (Germany). — Do I understand that the Netherlands Delegate wishes to bring forward a resolution on this question of uniformity, and the endeavour to induce States to carry out resolutions of the Conference, and are we here to vote on the wording of the text ?

The Chairman. — Are we agreed ? Has anyone any objection to Captain Luymes' proposal ?

I think we can adhere to it.

Commander Gerken (Chile). — Do I understand that no vote is to be taken on the question of whether the Offices should be required to adopt the Resolutions of the Conference ? Will Captain Luymes' motion be recorded in the proceedings ?

Captain Luymes (Netherlands). — The Bureau should be active instead of passive ; that is all I mean. I think that if a motion in that form is recorded in the proceedings of the Conference, the Bureau will deem it its duty to take account of that motion and follow it up during the next period.

Commander Gerken (Chile). — I understand that we have to discuss this part of what the Bureau proposes, namely that the States Members should supply the Bureau with information. Is there another proposal to replace that of the Bureau ?

The Chairman. — Has anyone anything to suggest ?

Captain Luymes (Netherlands). — I should say that the proposal of the Bureau is only in reply to a proposal of my country.

The Chairman. — The Bureau can do nothing without the help of the States Members.

Captain Luymes (Netherlands). — The Bureau has only to ask for charts — if it has not already received them, as usual — and examine them.

Captain Schweppe (Germany). — I think if we deal here with the resolution of the Netherlands we are doing the work of the Plenary Conference. I propose that we now come to the original statute with which we have to deal.

Commander Brandon (Great Britain). — This matter was handed over to us by the President to deal with. The proposal of the honourable Delegate of the Netherlands requires rather more activity on the part of the Bureau. Whether it has the time and the staff to carry out the work I do not know, but it is very desirable from the point of view of the Conference, I think, that it should be asked to do it. If it is unable to, it will no doubt explain the matter in the *Hydrographic Review* or by Circular Letter.

The Chairman. — Is there any objection to the Netherlands' proposal ?

M. Albert (I. H. B., Secretary to the Committee) read the following draft Resolution :

" The Committee, having discussed the Netherlands' proposal, expresses the wish that the Bureau should study the publications and charts of States Members, correspond with those States Members which have not carried out the resolutions of the Conferences, in order to know their reasons, and classify the replies so that they may be discussed by a future Conference ".

This text was adopted.

The sitting was adjourned at 1830.

CHAPTER II.

The second Meeting of the Committee was held at 0930, on Friday, 29th October 1926.

The Chairman. — We must now do our best to come to a speedy result. The work is extensive and our time limited, and though I do not wish to suggest a time limit for speeches I trust the discussions will not be too protracted.

We now turn to page 117 of the "Proposals".

2. *RAPID DISSEMINATION OF PUBLICATIONS.*

Great Britain suggests :

"that it would be of great assistance if the various States Members of the Bureau could, during the Conference, be impressed with the desirability of despatching new editions of charts and navigational books as soon as possible after publication".

It is not necessary to raise any discussion, the suggestion is clear.

Commander Brandon (Great Britain). — All that I desire to say is that although I am sure all States Members would agree with this Resolution on paper, it would be still better if they would subscribe to it in practice. In the past this has not always been the case. From our point of view it is most desirable that all Hydrographic Publications should be supplied by each State Member to the others as and when published, and this without a special request. When in some cases it has been ascertained after some delay that a new publication is in existence and we have applied for it, we have been told that we should have demanded it. We think no such demand should be necessary.

Then I should like, if I may, to draw attention to a mistake made by the Bureau in line 3 of the Comment that follows. It is there stated that "the subject was not discussed at the London Conference". In point of fact a very explicit Resolution was adopted, and you will find it if you look up the Minutes of the London Conference: Resolution IX. A. will show you that it was adopted on paper once but it has not in all cases been put into practice. I would urge that, for the future, States Members should make every effort to comply with the Resolution.

The Chairman. — Are there any objections? None, well then, the Resolution is adopted.

3. *STATUTES.*

The following changes in the Statutes of 1923 are proposed by the Bureau and by the representatives of France, the Netherlands, Sweden and the U. S. of America.

If it is not specially mentioned that the proposal is made by one of the nations, it is made by the Bureau.

REVISION OF THE LIST OF STATES MEMBERS OF THE BUREAU.

Article 2. — (c) change :

" (Nil) " into : " (Belgium) ".....1925".

Here, of course, it is clear that " Nil " must be changed into " Belgium ". The non-payment of her contribution will come before the Committee on Finance but we can adopt this change now. Has anybody anything to propose? Belgium has withdrawn her membership. We simply take note of the fact and the list of countries in Art. 2 of the Statutes will be placed on file with the Secretary General. The name of Belgium must be deleted.

M. Albert (I. H. B., Secretary to the Committee). — Germany's name must be added to the list.

Captain Schweppe (Germany). — I think we might propose a change in the Statutes so that the names of the Members may appear in an Appendix to the Statutes, which Appendix the Bureau will keep up-to-date ; in that way it will not be necessary to change the Statutes every time a country joins or withdraws from the Bureau. Article 2 has three lists, List (a) the States which were Members of the Bureau at its creation ; List (b) the States which joined the Bureau later and List (c) those which have withdrawn their membership. According to Art. 64 of the Statutes, all changes in the texts of the Statutes must receive the approval of a two-thirds majority and this means that if a new Member is registered, the registration is not final until confirmed by that two-thirds majority. It would seem therefore simpler to place these names in an appendix, which could be kept up-to-date by the Secretary General, in preference to having the Statutes changed every time a member joined or withdrew.

I think we ought to change the text of Art. 2.

The Chairman. — All we need is a list of Members which is kept up-to-date.

Captain Fablet (Argentina). — I should like to know what is the proposal which has been made.

The Chairman. — It will be handed to you as soon as it has been drafted and the list will be kept up-to-date.

Professor Tenani (Italy). — Art. 61 (d) provides for such changes.

Captain Schweppe (Germany). — But do you not think our method is simpler? It would be necessary of course to send a Circular Letter to the Members to announce these changes.

The Chairman. — Does anyone wish to speak?

Commander Gerken (Chile). — I agree with the proposal of the German Delegate. In Limited Companies the shareholders do not appear in the Statutes. This is the same thing.

Mahmoud Bey Bayram (Egypt). — No, I think that every time a new Member joins the name should be notified to the other adherents.

The Chairman. — Captain Schweppe and I have now drafted the following formula :

Captain Schweppe (Germany). — The following is the proposal :

" States which were Members of the Bureau at its creation in June 1921, those that joined the Bureau subsequent to its establishment, and those which have withdrawn their membership, are enumerated in Lists (a), (b) and (c) of the Appendix.

" These lists shall be kept up-to-date by the Secretary General ".

(The following is the French text proposed :)

" Les États qui ont adhéré au Bureau lors de sa fondation en Juin 1921 ; ceux qui ont adhéré depuis cette date, et ceux qui se sont retirés, sont indiqués dans les listes (a), (b), (c) de l'Appendice.

" Ces listes seront tenues à jour par le Secrétaire General. »

This was adopted unanimously.

M. Fichot (France). — Could we not add that all changes will be communicated to all States Members ?

Captain Schweppe (Germany). — I do not think this is necessary because there will always be correspondence between the various Members before they join or withdraw.

The Chairman. — This will appear in the circular letter.

Mahmoud Bey Bayram (Egypt). — When however a Member belongs to the League of Nations the Bureau will not necessarily have to inform the Members.

M. Fichot (France). — Sometimes the personnel changes and it might be as well to guard against oversights.

Captain Schweppe (Germany). — I do not think there is any rule stating that Members have to be informed, but the Bureau does it without any instructions.

The Chairman. — This is adopted. Now for Art. 3, page 4 of the Statutes :

CONDITIONS OF ADMISSION AS A MEMBER OF THE BUREAU.

3. " (a) Any other State, Member or ex-Member of the League of Nations, if it so desires, shall be admitted as a Member of the Bureau ".

The suggestion is the following : (page 117).

Article 3 (a). — Add :

" on condition that it pays its proportional part in the assets of the Bureau, as given in the balance sheet of the Annual Report if it is admitted before July 1st, and in a balance sheet to be drawn up for July 1st, if it is admitted after that date ".

Insert new article (b) :

" This proportional part will be calculated as follows : the total amount of the assets of the Bureau, multiplied by the number of votes allocated to the new State Member according to its tonnage, and divided by the total number of votes allocated to the aggregate States Members before the admission of the new Member. »

change (b), into (c) and add :

" which implies the pecuniary liabilities mentioned in Art. 3 (b). »

This is an important alteration. Has anyone anything to say ?

Commander Brandon (Great Britain). — I wish to say only that it seems a reasonable proposal and I should like to support it.

The Chairman. — It seems to me that a new Member has to pay for membership, otherwise the other Members have to pay too much. If anyone has another opinion I shall be very glad to hear it.

Captain Gerken (Chile). — I wish to support it.

Commander Rasikotsicas (Greece). — For wealthy States it may mean nothing, but for small States it may mean a heavy burden, and if a small State is anxious to join the Bureau, but has to pay a very big sum, obviously it cannot afford to do it. I am therefore against this proposal.

Captain Schweppe (Germany). — What countries with small navies are there ? How can we settle this question ? Turkey for instance, how much would she have to pay if she wished to adhere.

M. Albert (I. H. B., Secretary to the Committee). — Our present assets are about 300,000 Swiss francs, that would mean about 3,000 francs per unit. May I make a suggestion ? I think our object is to prevent, in case the Bureau were liquidated, those Members who have paid their contributions since the beginning having to accept the distribution of the assets amongst

other Members who have only belonged to it for a short while. What we have to do is to alter Art. 63 (v) slightly. This paragraph reads :

" The credit or debit balance of the Bureau shall be divided in proportion to the amounts of their annual contributions amongst the actual Members at the moment when the suppression is decided upon ".

It should read :

" The credit or debit balance of the Bureau shall, at the moment when the suppression is decided upon, be divided amongst the States in proportion to the amounts of their contributions since they became Members ".

Commander Rasikotsicas (Greece). — I think we ought to have a fixed subscription : I think we ought to settle beforehand how much the various Members have to pay.

Commander Gerken (Chile). — I do not agree with this suggestion, because I do not see why we should take into account the suppression of the Bureau. We do not anticipate it. We are progressing well and if a new Member joins it ought to pay what the others are paying. After all, it is not a very huge sum.

Commander Rasikotsicas (Greece). — I propose that a sum should be fixed as entrance fee (*droit d'entrée*). Should a Member join the Bureau many years later than the others the sum will be enormous.

Commander Brandon (Great Britain). — I should like to say that if the proposal of the Greek Delegate were adopted, the contribution to be paid under this head by a small State would probably be greater than if the original proposal were adopted, because we believe and hope that the number of the States Members will increase. The assets are not likely to increase very largely, owing to deterioration of furniture, *etc.*, but the share of each Member will grow less and less as the number of Members increases. The proposal of the Bureau appears to be just, whereas any sum we might fix now might in a few years' time be unjust. I prefer to maintain the Bureau's proposal.

Captain Schweppe (Germany). — There are three proposals before us :

- (1) That of the Bureau supported by the British Delegate :
- (2) That of the Greek Delegate who desires to substitute the contribution proposed, a modest one at a fixed rate ;
- (3) The proposal of M. Albert who says that it is not necessary to change this Art. 3, but to modify Art. 63. (v).

I think we had better put these three proposals to the vote.

The Chairman. — I can to some extent agree with Commander Rasikotsicas with respect to the entrance fee but, as Captain Brandon says, it will possibly increase the contributions of the States Members I should not recommend it. I think therefore we must vote on the whole as Captain Schweppe proposes.

Commander Rasikotsicas (Greece). — I am ready to see the good in all the proposals which have been made so far, but in the one before us I see something which will frighten States who might be joining in the future. It is better to know exactly what has to be paid. The Bureau wants to offer to all maritime States the possibility of taking advantage of the work which other maritime States are doing. A smaller sum should be fixed so as to make it possible for less wealthy States to enter.

Captain Fablet (Argentine). — I think we could close the discussion and put the question to the vote.

The Chairman. — Yes. We will vote on the Bureau's proposal.

The vote is taken. Eight in favour. (Adopted).

The Chairman. — We will bring Commander Rasikotsicas, proposal before the Plenary Meeting.

Commander Brandon (Great Britain). — The Committee will have to

report and give an opinion; where there is a divergence of views an opinion can only be given by a majority.

The **Chairman**. — The Bureau's Proposal has been adopted. We now pass to Art. 4 (b)

DELAY IN PAYING CONTRIBUTIONS.

"Cancel in the first line: 'after 1st January 1923'".

There is nothing to discuss here. Do you agree to this?

(Agreed).

Commander Rasikotsicas (Greece). — May I ask what Art. 4 (a) means.

Commander Brandon (Great Britain). — It is quite clear in the English text.

The **Chairman**. — We now pass on to Art. 5 (a). There is no discussion necessary here.

SUSPENSION OF MEMBERSHIP.

Art. 5 (b): Insert new article:

"If the accounts with the Bureau are not settled before the withdrawal is notified, it shall be expelled from Membership".

The wording is perhaps a little strong, but I think it is quite logical. Are there any objections? None. Well then Art. 5, paragraphs (a) and (b) are adopted.

ADOPTION AND APPLICATION OF THE DECISIONS MADE AT THE CONFERENCES (cont.).

Art. 6 (iii).

Commander Brandon (Great Britain). — We settled this yesterday.

M. Albert (I. H. B., Secretary to the Committee). — It was held over. A Resolution was adopted, but as there was a mistake in the translation of Art. 6. it was decided to hold it over.

The **Chairman**. — Then this will not be discussed now. Art. 6 is held over until to-morrow.

CHARACTER OF WORK OF THE BUREAU. GEOGRAPHICAL POSITIONS — AIDS TO NAVIGATION.

Article 9 (a):

Change the first two lines into:

"The Bureau shall have a preponderant technical character and the principal work which should be undertaken is the following: "

(a) (ii) Cancel:

"of geographical positions".

Change:

"charts, etc." into: "charts, aids to navigation, etc."

I think we can adopt this without further discussion.

Commander Brandon (Great Britain). — I do not agree. It is not the view of the British Delegation. The British Delegation thinks that the Bureau should, if anything, have preponderantly an administrative character. It is not thought that the Bureau should do the work it has been trying to do, namely the work of the experts attached to the individual Hydrographic Offices. The Bureau should coordinate their activities where this can usefully be done, and through the *Hydrographic Review* and other publications, should render the results of their work accessible to other investigators.

As regards the second proposal, to cancel the drawing up of lists of geographical positions, the British Delegation considers that such lists should be proceeded with, that it would be of great utility and that it is proper and legitimate work for the Bureau.

With regard to the third proposal, to add "aids to navigation", the British Delegation cannot agree with this because it does not consider that this is a hydrographic question; it is a question of navigation. The Bureau was founded to deal with hydrographic matters and not with matters of general navigation. I can go into further detail, if necessary, but as the question will arise again in another connection, I will not speak at greater length now.

The Chairman. — It seems to be that the chart is one of the most important aids to navigation.

Commander Brandon (Great Britain). — By "aids to navigation" I understand a sea-mark. "Aids to navigation" is really an American expression, not an English one. It means buoys, lights and sea-marks.

M. Albert (I. H. B., Secretary to the Committee). — Port signals, also.

Commander Brandon (Great Britain). — The expression was introduced by the Americans; you may find it in English publications but it is not strictly speaking English.

The Chairman. — In that case I agree with you. I did not know it.

Commander Brandon (Great Britain). — Would you like to ask Admiral Niblack's opinion? He can tell you what he means by the term.

(Admiral Niblack was requested to appear before the Committee).

The Chairman. — Would Commander Brandon formulate another proposal?

Commander Brandon (Great Britain). — I think the Article should stand unchanged. I deprecate too many changes in these Articles. They have presumably been discussed and rediscussed from every point of view, and in many cases we shall only go over the old ground if we discuss them any further. Undoubtedly they are capable of improvement, but is it advisable to change constantly? You merely confuse people and you do not always know quite what reasons have led to the particular wording being adopted. Those who drew up the Statutes are not here and I deprecate changes without very good reason.

M. Fichot (France). — I agree, especially as the changes suggested are very slight.

Captain Schweppe (Germany). — I agree with the British Delegate, but I should like to hear what Admiral Niblack has to say. I think the Bureau is asking to have this change made on account of the work of the Bureau. They have difficulties to contend with and they find it best to meet them by changing the Statutes. Perhaps we could give them some other advice on the subject.

Admiral Niblack (Director of the I. H. B.). — I have just been before the Committee on the Work of the Bureau to explain the organisation of the Bureau with reference to its work and also what has developed in the last two and a half years through the relation between the Bureau and the League of Nations. In considering the work of the Bureau I pointed out that it has considerably broadened through the demands made on it.

With regard to the specific words "aids to navigation", as given in Hydrographic Publications, they include light lists, buoy lists, storm warning signals, coastal and port signals, life-saving stations, — all the information which is useful to mariners to make navigation safer and easier on all the seas of the world. The proposal is that a list of these shall be published in an Appendix to the International Signal Code which all mariners are required to have, so that it will not be necessary to put all this information in Light Lists and other periodic publications as it was determined to do by the London Conference, whereas we are proposing that these Lists should be put into a separate publication and taken out of the Light Lists.

Commander Brandon (Great Britain). — Excuse me, it is not quite the question we are dealing with. We are not dealing with the whole scope of Admiral Niblack's proposals, which I suppose are indicated by the words "aids to navigation". We merely wanted to know exactly what Admiral Niblack understands by "aids to navigation".

Admiral Niblack (Director of the I. H. B.). — There exists in every Hydrographic Office a somewhat different conception of what information should be given to mariners. I have here, for instance, a British Channel Pilot which gives the most thorough and comprehensive lists of life-saving stations, coastal and port signals, and all "aids to navigation" which conduce to safety of life at sea and safety of navigation. Some "Sailing Directions" do not include this information at all. The Bureau has tabulated exactly such matter for the information of those particular Hydrographic Offices which desire to include it in their Sailing Directions. Meanwhile this information has served Conference purposes as well, but this has nothing to do with this particular question here. The tabulation is done from the various hydrographic publications, but there is information from other departments which also constitutes "Aids to Navigation" according to the views of the Bureau. Our lists are drawn up for the benefit of all Hydrographers who wish to use them in order to inform their seamen as to the "aids to navigation" of all countries other than their own.

The Chairman. — Would you include charts?

Admiral Niblack (Director of the I. H. B.). — Yes. We are making lists of charts now. You say you do not approve of our undertaking technical work. In the "Proposals" I have so stated, and I do not mind saying very specifically that the duties of the Directors include all technical work which comes within their previous experience as hydrographers, and that the Directing Committee should not conduct the administrative work of the Bureau but engage in the technical work specified in Art. 9 (a). All the work mentioned in that Article is technical. The Bureau should tabulate all information which contributes to the safety of navigation and of life at sea.

"Geographical Positions" have been crossed out of the Statutes, but I hope they will be restored. I would point out that, as mentioned in my Comment on the Dutch proposal, during the past five years there have, in fact, been only two active Directors for a period of four years, and three for one year, and that during the period when we had only two Directors, it has been very difficult to take action when votes were tied. The senior did not have the controlling vote, as he should.

Commander Brandon (Great Britain). — I rise on a point of order. Are we free to discuss the work of the Bureau? We are here, I think, to discuss the Statutes only. Are not "Aids to Navigation" primarily buoys, beacons and lights?

The Chairman. — Please wait a moment. I only wanted to ask what "aids to navigation" signified. We thought it was an American expression that only included buoys, beacons and not charts. Are we right?

Admiral Niblack (Director of the I. H. B.). — Yes. As a matter of fact that was put in by Admiral Phaff to mean all aids to navigation, such as are now given in the Sailing Directions of the British type, coastal and port signals, life-saving stations, etc...

The Chairman. — Then it is not only beacons, it comprises also lists?

Admiral Niblack (Director of the I. H. B.). — I asked to be permitted to come before the Committee to bring up various matters in the Statutes and now I am being asked if we understand aright one certain thing only. But I think it would help you to understand our position if you knew that the work of this Bureau has been, since 1922, organised into three Sections. So I want to put before you this question of Sections. Section III has to do with Charts and Publications, and in tabulating data we found ourselves with the proposal of the 1919 Conference to put those lists before the Hydrographers so that they can, themselves, decide what to do with them. Aids to Navigation mean coastal and port signals, storm-warning signals, buoys, beacons, and everything to do with aiding navigation.

Captain Douglas said to me just now before I came here that he would

put our Recommendations regarding Article 9 on the Work of the Bureau before the Statutes Committee.

The Chairman. — The question now is whether we should adopt the proposal of the Bureau suggesting that it should have a preponderantly technical character. I understand that Commander Brandon is of another opinion and thinks that the Bureau should not have a preponderant technical character.

Commander Brandon (Great Britain). — The British Delegation does not consider that the Bureau should stretch out beyond the question of hydrography. The original Statutes mention hydrography at every point. Naturally at certain points hydrography impinges on oceanography and other sciences as mentioned yesterday by the honourable Delegate for Spain, and at such points it is desirable to establish contact, but the British Delegation cannot subscribe to the Bureau occupying itself with buoyage and beaconage. The British Hydrographic Office has no control over these matters, other quite independent organisations are charged with them. That is one of the objections to having aids to navigation included here.

As to the idea of technical work generally, we do not mean that the Bureau should not occupy itself at all with technical work, but we do not wish it to be primarily a body or college of experts. The Directors should be officers with excellent hydrographic experience, practical and theoretical, who can judge of the subjects which are submitted to them by the various States and can give a good sound opinion based on practical experience, but we do not want them to do the work of experts. That is at the bottom of the objections I raised on behalf of the British Delegation.

Admiral Niblack (Director of the I. H. B.). — I should like to point out that such work of the Bureau has been undertaken by the vote of the States Members expressed to this Bureau in reply to a circular letter. The question of standardisation of buoyage was proposed before I entered the Bureau, and was voted on by the States Members as being a subject to be taken up. I undertook the work at the express desire of a majority of the States Members. Nautical publications also were to be standardised and lists made. The data have been collated and published and now the work has been terminated. It was done in addition to the other work and it has cost the Bureau relatively little, as a gift of such publications was made by the United States Hydrographic Office. All this work was done in accordance with Art. 17, and the other work of the Bureau was not neglected. In the next five years there will be no need to take up this work of tabulating life-saving stations, port signals, *etc.*, as it has been completed, and needs only to be kept up to date.

The Chairman. — With respect to Commander Brandon's suggestion I must say that in Norway we are in the same situation with regard to lighthouses and port signals, for these come under another authority than our own, but whenever I receive anything on such subjects from the Bureau, we send it to the Government and ask to have it forwarded to the institution concerned: lighthouses to the Institute for Lighthouses, Port Signals to the Establishment for Ports in Norway, and I advise my Government on the subject. My own office cannot of course do anything in the matter, but we are most grateful to Admiral Niblack that he has worked on this question because it is of importance to navigation generally.

Commander Rasikotsicas (Greece). — I want to speak only on navigation. In States where the Hydrographic Service has existed for some time, they are well regulated and work smoothly, but in new States there is still much to be learnt. Therefore this statement that "the Bureau shall have a preponderant technical character" must be gone into. If a new Service has not applied the regulations in force, their attention must be drawn to it by the Bureau, and they must conform to the principles of the I. H. B.

With regard to Paragraph II, I might just mention that in Greece buoyage

does not come under our Service, but there we have much to learn and the Bureau should inform us of what happens in other States. I think therefore that this sentence should stand.

Commander Brandon (Great Britain). — I suggest the word " practical " instead of " technical ".

Captain Schweppe (Germany). — As far as I can see, the British Delegation does not wish to accept changes to Art. 9, but to maintain the original text.

Commander Brandon (Great Britain). — Yes.

Captain Schweppe (Germany). — We will vote as to whether we adopt the resolution of the Bureau.

M. Fichot (France). — Admiral Niblack wants to maintain the words : " of geographical positions ".

Admiral Niblack (Director of the I. H. B.). — If you wish to change this wording I would say it is not very important, because we do what is necessary.

Captain Fablet (Argentine). — I adhere to the modifications suggested in this report. We are going on with technical work, but the question is whether or not it should be preponderant. That is not really so important. Admiral Niblack wants to retain " the geographical positions ", and with regard to " Aids to navigation " we wanted to know its exact meaning.

Admiral Niblack (Director of the I. H. B.). — You can strike it out. It has been finished.

The Chairman. — Then for Art. 9, we do not adopt the new proposal. Are you all agreed ?

(Agreed).

Commander Brandon (Great Britain). — We are not here to criticise the work of the Bureau in the past five years : that is not our province. We have great admiration for the work done by the Directors under very trying conditions. We are here to lay down Statutes for the next five years.

The Chairman. — Yes, but we are obliged to deal with the proposals before us.

Admiral Niblack (Director of the I. H. B.). — I shall be glad to have an opportunity of expressing my views later, on Article 17 of the Statutes.

Captain Schweppe (Germany). — May I address a question to Admiral Niblack ? Do I understand that according to the Statutes, nobody can make a new proposal unless they have placed it before the President of the Conference twenty-four hours before it is to be discussed ?

Admiral Niblack (Director of the I. H. B.). — That is for proposals which are to come before the plenary sessions of the Conference.

Captain Schweppe (Germany). — Would not that be so for your proposals referring to Article 17 ?

Admiral Niblack (Director of the I. H. B.). — No, this is only in connection with the League of Nations.

Commander Brandon (Great Britain). — After hearing Admiral Niblack's statement any three Members can put forward a proposal if they wish to do so. Here we are only dealing with the proposals actually before us.

M. Albert (I. H. B., Secretary to the Committee). — The Chairman of the Committee cannot give permission for discussions ; the President of the Conference will have to be asked.

Admiral Niblack (Director of the I. H. B.). — I understood that this Committee could bring up additional changes not originally proposed to be made.

The meeting rose at 1200.

The Meeting was resumed at 1500.

BIBLIOGRAPHY OF STANDARD HYDROGRAPHIC DOCUMENTS.

Art. 10 (d) on page 119 of English text, page 121 of French text.

Proposal of the Bureau to change "form" into "make".

The Chairman. — I do not see the difference between the two words, and would like to hear Commander Brandon on the point.

Commander Brandon (Great Britain). — I think the word "make" rather implies creating. You cannot create a collection. "Collect" means to assemble. You can certainly form a collection. You buy the material or ask someone to give it to you. It would not be an improvement to alter the word "form".

Commander Gerken (Chile). — I suggest that it would be helpful to hear one of the Directors with regard to the proposed change.

Commander Brandon (Great Britain). — As the Bureau has not given an explanatory note on the proposed change they evidently do not attach much importance to it.

The Chairman agreed.

Commander Gerken (Chile). — My suggestion was made as a compliment to the Directors.

Further proposal of the Bureau to add to Art. 10 (d) "and publish from time to time a bibliography of publications on the subject".

Captain Luymes (Netherlands). — I think that this new wording could be adopted.

Commander Brandon (Great Britain). — I would point out that Art. 9 (a) (ii) covers the proposal. It might be very expensive and not desirable to publish a bibliography from time to time.

M. Albert (I. H. B., Secretary to the Committee). reminded the Committee that for two years each number of the *Hydrographic Review* had contained a part of this bibliography.

Commodore Reinius (Sweden). — I am of the opinion that the information need not be specially published. It would naturally be published in the *Review*.

The Chairman invited the Delegates to vote whether or not they were in favour of leaving Art. 10 (d), which, it had been pointed out, was covered by Art. 9 (a) (ii), unaltered.

(The vote was taken and was in favour of retaining the original text).

Commander Rasikotsicas (Greece). — I assume that the result of the vote would not be taken to mean that the bibliography, as hitherto published, should be discontinued.

PRESIDENT OF THE DIRECTING COMMITTEE.

Article 22 (i).

Proposal of the Bureau to change

"one of whom shall act as President" into "The Director to whom the greatest number of points has been allocated at the elections shall be the President of the Directing Committee".

Captain Luymes (Netherlands). — I do not agree with the proposal of the Bureau. Art. 59 provides for the election. I propose the following wording: "This Committee shall consist of three Members, one of whom shall act as President and one as Acting President. The precedence of the three Directors is regulated in Art. 59". But I suggest that we adjourn the discussion on Art. 22 (i) until Art. 59 is discussed.

The proposal of Captain Luymes to postpone the discussion was agreed to.

CONDITIONS OF ELIGIBILITY FOR DIRECTORS.

Article 22 (ii).

Proposal of Sweden to add :

"Only those are eligible who are or have been Hydrographers of the Navy of their respective countries, or have, for a considerable time, held a high post in any Hydrographic Department or Office.

"No one is eligible who, at the date of the election, is more than 65 years old".

Comment of the Bureau.

"The Directors might possibly be personally involved in these questions and therefore abstain from giving an opinion as to the desirability of the acceptance of these additions.

"However, they think it useful to point out that it should be stated what authority has to decide which is 'a high post in any Hydrographic Department or Office', and which is 'a considerable time' during which the candidate should have held it".

Commodore Reinius (Sweden) expressed the opinion that Directors should not be too old.

The Chairman. — I propose first to discuss the point that Directors should be Hydrographers. It seems to me that the Bureau was established as a practical Bureau to work for sailors, but now one of the Directors might be a professor. It is natural, however, that the Bureau should consist of Hydrographers.

M. Fichot (France). — I do not think it necessary to make a rigid rule. The titles of candidates would be examined, and every Member, before voting, would be able to judge of a candidate's qualifications.

Captain Schweppe (Germany). — I feel sure that the States Members in their own interests, would only nominate candidates best qualified.

Commander Brandon (Great Britain). — I agree with M. Fichot and Captain Schweppe.

Captain Fablet (Argentina). — I am in favour of rejecting the modification, because Art. 22 (ii), as it stands, provides that the Directors should fulfil the following two important conditions: considerable sea experience and great knowledge of practical hydrography.

Captain Luymes (Netherlands). — I think that it should be stated that it is very desirable that candidates should have had a large experience in a Hydrographic Office.

M. Fichot (France). — I agree. A hydrographer is not necessarily one who sits in an office and makes charts but one who is capable, from his experience, of finding data which would form the elements of a chart.

Commander Gerken (Chile). — I am afraid that if the Swedish proposal were adopted the right of the States to vote for the person they wished to vote for would be abrogated, and that would be impossible in an International Bureau.

Commander Rasikotsikas (Greece). — I wish to draw attention to the fact that there is a difference in principle between Para. (ii) of Art. 22 and the Swedish proposal. Perhaps the Swedish proposal could be taken into account by making Art. 22 (ii) read: "the three Directors must be of different nationalities and should have had considerable sea experience and have great knowledge of practical hydrography".

The Chairman. — I recognise that it is also desirable, according to the Statutes, that the third Director should have sea experience. It is not absolutely necessary but one could read between the lines of the Statutes that it is desirable. I do not think that Commander Rasikotsikas' proposal is exactly covered by Commodore Reinius' proposal.

Commodore Reinius (Sweden). — The Swedish proposal is to add to Art. 22 (ii) the words "only those are eligible who are experienced...".

Commander Rasikotsikas (Greece). — I do not see a great difference between the proposal and the amendment I have suggested.

The **Chairman** asked **Commodore Reinius** if he meant by the term "hydrographer" the head of a Hydrographic Office always.

Commodore Reinius (Sweden) replied that that was his meaning. Head of a Hydrographic Office, or one who had for a considerable time held a high post in a Hydrographic Department. All persons in the Office who held, or had held a high position, should be eligible.

Captain Schweppe (Germany). — I could not imagine that any State would propose a candidate who has not been in any way a hydrographer in his own State. No one could do his duty to the Bureau unless he had been a hydrographer. Further discussion of the question seems superfluous, as Art. 22 (ii) appears to cover everything.

Captain Fablet (Argentina). — I quite agree with **Captain Schweppe**.

The **Chairman**. — There is no doubt that Art. 22 (ii) admitted of a third Director not having been to sea, and that was the question.

Commander Brandon (Great Britain). — I agree with **Captain Schweppe**. It would be a mistake to tie down Delegates and future Conferences too much. It is just conceivable that some eminent civilian, who had made hydrography his lifelong study, might present himself and be a suitable candidate. Cast iron regulations providing for every contingency would not be satisfactory.

M. Fichot (France). — I also think that the additional provision is superfluous, and that it is not at all necessary to be bound by it, as it is always possible to examine qualifications.

Captain Sampaio (Brazil). — I propose that the text should be worded "The three delegates must be of different nationality, and must have considerable experience", and so on, and that the section of the paragraph saying that only two of them should have considerable experience should be deleted.

Captain Schweppe (Germany). — I wish to point out that that was the proposal of the Greek Delegate.

Commander Brandon (Great Britain). — I do not oppose the amendment, but prefer to maintain the original text.

The **Chairman** asked if there was any objection to **Captain Sampaio's** proposal.

Commodore Reinius (Sweden). — I think the Greek proposal better than the Article as it stands at present.

Captain Luymes (Netherlands). — I have seen all the elections that have taken place for the Directors of the Bureau and I do not consider that the Article at present provides sufficiently for candidates' qualifications.

Captain Fablet (Argentina) agreed with the Greek proposal.

The **Chairman** first put before the meeting the proposal of **Commodore Reinius**, that candidates should only be eligible if they had been hydrographers of the Governments of their respective countries, or held for a considerable time a high post in any Hydrographic Department.

(A vote was taken. 4 Delegates were in favour of Commodore Reinius' proposal).

Professor Tenani (Italy) mentioned that he only voted for the first part of the Swedish proposal.

A vote was then taken on the Greek proposal to delete the words "at least two of them".

8 votes in favour.

The Greek proposal was adopted.

Article 22 (ii) would thus read:

"The three Directors must be of different nationalities and should have had considerable sea experience..."

AGE LIMIT FOR ELIGIBILITY.

The **Chairman** put the next proposal: "No one is eligible who, at the date of election, is more than 65 years old".

I look upon this as a very delicate question, and am doubtful if it is proper for the Committee to discuss it. It would, of course, have to come up at the Plenary Session. I do not object to discussing it, but would be glad to hear opinions.

Commodore Reinius (Sweden). — The proposal has been put forward, and, in my opinion, must be discussed. Directors are elected for five years, and if they were 70 at the time of their election they would remain till they were 75, which is, I consider, too great an age.

Captain Schweppe (Germany) supported the Swedish proposal to limit the age to 65.

Commander Brandon (Great Britain) also supported the proposal.

The **Chairman** said that he, as Norwegian Delegate, added his support.

Commander Gerken (Chile). — Some men at 65 are younger than others at 45. I do not think it desirable to lay down a rule.

Captain Luymes (Netherlands). — I quite agree with Commander Gerken. It might be a hindrance to the Bureau if the choice of candidates were restricted on account of age.

The **Chairman**. — I quite appreciate what Commander Gerken has said, and give as an instance Mr. Gladstone, who did some of his best work when he was 80. But such cases are exceptions, and I agree with the age limit proposed.

Commander Gerken (Chile). — It is necessary to respect the right of Delegates to vote for the candidates they prefer. An age limit would encourage Delegates to vote in one direction.

Captain Luymes (Netherlands) agreed with Commander Gerken.

Commander Brandon (Great Britain). — I think that, to be of any value to the Bureau, hydrographic experience should be fairly recent, because new methods are constantly being introduced, and an officer of 65 is getting near the age when he will be out of touch with these things. An age limit might save Conferences from difficulty in cases where the candidates included Directors over 65 who had rendered great service to the Bureau and merited the gratitude of Delegates.

M. Fichot (France). — I am in favour of an age limit. At the same time it is laid down that Directors should have considerable experience, and 65 would be the age at which civil servants with great experience in hydrography were entitled to their pensions, in most countries. The age limit of 65 might thus deprive the Bureau of the services of very useful men.

Captain Fablet (Argentina). — I agree with Commander Gerken that age should not always be considered and propose that the age of candidates whose names are before the Conference should be indicated.

The **Chairman** reminded the speaker that ages of candidates were always indicated at elections.

Commander Rasikotsicas (Greece) supported Commander Gerken and Captain Fablet.

Commander Gerken (Chile). — Delegates always have information not only as to the qualifications of Directors, but also as to their state of health. When a Director is ill, he receives 12 months' leave, and is replaced during that period. Under these circumstances, Delegates should not be restricted in their choice by the imposition of an age limit.

(A vote was taken and three Delegates only were in favour of the age limit of 65).

Captain Schweppe (Germany). — I understand that, although it is the practice to add ages to lists of candidates, it is not official. I think it should be made official, and propose that Art. 59 (ii) should read "The name and age of each candidate shall be accompanied by a note giving his title to the position for which he is a candidate".

Captain Luymes (Netherlands). — I am of opinion that the wording "his title to the position" means also that the age shall be given.

Captain Schweppe (Germany). — I do not desire further discussion on my proposal. It has been supported and thus the proposal can be put before the Plenary Session.

The Chairman. — This is only a preliminary discussion. Only three Delegates are in favour of the age limit, but the whole question must go to the Plenary Session.

Commodore Reinius (Sweden). — I reserve the right to bring the question before the Plenary Session and suggest that, as the President is personally affected by it, he should vacate the chair in favour of the Vice-President during the age-limit discussion.

Captain Luymes (Netherlands). — I think that in such a case the person concerned should be allowed to use his own discretion.

PERIOD OF APPOINTMENT OF DIRECTORS.

The Chairman read Art. 23, as follows:

"The Members of the Committee shall be appointed for a period which terminates on the last day of the third month succeeding that during which the new Committee has been elected".

The Directing Committee proposes to add:

"except in the case of a member elected at a by-election. The termination of service of this member shall be at the end of five years, but in this case the Conference shall determine, by special vote, which of the three Directors shall act as President of the Directing Committee and who will take his place in case of absence".

Captain Luymes (Netherlands). — I am strongly opposed to the tendency of this innovation, which would entail putting the interests of the Directors before those of the Bureau.

Under the existing statutes, the voters of the States Members have the opportunity to make personal acquaintance with the candidates, or at least to inform themselves verbally about them, as those candidates will be known at the sitting of the Conference and would, in the majority of cases, also be Delegates. If the proposal were accepted, this would not be so in the future, because the consequence will be that in the end every Director will have been elected at a by-election. For a place once filled up at a by-election will remain such automatically in the future.

The advantage of continuity put forward by the Bureau does not weigh against that of better knowledge of the personalities and qualities of the candidates.

Moreover, I do not deem such continuity an advantage under all circumstances. Neither do I think the proposed change necessary, for the Conference will take into account, at the elections, whether a Director candidate for a re-election has fulfilled a full mandate or not.

Commander Brandon (Great Britain). — I associate myself with Captain Luymes. In the opinion of the British Delegation a by-election is a "pis aller". The Bureau's proposal would increase the number of by-elections indefinitely.

Commodore Reinius (Sweden) agreed with Commander Brandon.

In reply to the Chairman, Captain Luymes said his desire was that the addition proposed should be entirely deleted.

(A vote was taken and the addition to Art. 23 proposed by the Bureau was rejected).

PREPONDERANT VOTE FOR THE PRESIDENT OF THE DIRECTING COMMITTEE.

The **Chairman**. — *Article 26*: "The Committee shall meet at least once a week".

The Bureau proposes that that be changed into:

"When the Committee assembles as the Directing Board, two Directors only attend the meeting and a decision cannot be postponed to a full meeting, the vote of the President, or of the acting President, shall be preponderant".

M. Albert (I. H. B., Secretary to the Committee) pointed out errors in wording.

After discussion, the **Chairman** proposed that the Statute should remain unaltered.

Captain Fablet (Argentine) supported the proposal of the Bureau.

M. Fichot (France). — I do not quite understand the meaning of the addition. In what capacity could the Committee assemble but as the Directing Board.

Commander Brandon (Great Britain) suggested a slight alteration in the wording: "If only two Directors attend a Committee meeting.....".

M. Fichot having spoken,

The **Chairman**. — I propose to proceed to Art. 28 if no one has anything further to say. Then Art. 26 would now read:

"The Committee shall meet at least once a week. If only two Directors attend such a meeting and a decision cannot be postponed to a full meeting, the vote of the President, or of the Acting President, shall be preponderant".

The **Chairman**:

PERSONNEL OF THE BUREAU — CONTROL BY THE DIRECTING COMMITTEE — INTERNAL ORGANIZATION.

Article 28:

"The personnel shall consist of a Secretary General and a certain number of technical and administrative employees".

The proposed change is as follows:

"The personnel shall consist of technical assistants who assist the Directors in their work, and administrative employees under a Secretary General".

Captain Luymes (Netherlands). — I am opposed to the change, for it would put the Secretary General on the same footing as the Directing Committee, which has exclusive authority over the administrative employees. The whole internal organisation of the Bureau should be left to the Directors.

Commander Brandon (Great Britain). — I agree generally with Captain Luymes that no change is necessary. It seems that two authorities in the Bureau would be undesirable. The Secretary General is naturally under the control of the Directors, and is placed in general control of the staff, but the internal organisation is the affair of the Directors.

Captain Schweppe (Germany). — I consider it logical to decline the proposed modification, as the modification of Art. 9 (a) has been rejected. I agree with the proposal of the two previous speakers.

(A vote was taken, and the Bureau's proposal was rejected).

The **Chairman** said that the original text therefore remained. He would pass to Art. 29.

SICK LEAVE OF THE SECRETARY GENERAL.

29. (a) "The Secretary General shall be chosen by the Directing Committee from amongst the candidates selected for this post by the Delegates to the Conference according to the method described in Article 59, (x) and (xi).

(b) "Should the post of Secretary General fall vacant during the period between Conferences, a by-election may be held in conformity with Article 60"

Addition proposed by the Bureau :

(e) "Having been incapacitated for duty, in any consecutive 8 months, he shall receive full pay for 4 months and half pay for 4 months and automatically cease to be Secretary General at the expiration of the 8 months".

Captain Luymes (Netherlands) referred to the previous proposal that Directors should automatically cease to be Directors after twelve consecutive months' absence.

The Chairman remarked that that question had been dealt with.

Captain Luymes (Netherlands). — It would be possible for a Director to be absent for eleven months, come back for a month, and take another eleven months' leave for illness.

The Chairman reminded Captain Luymes that the paragraph proposed to be inserted was in conformity with the League of Nations Statutes.

Captain Luymes (Netherlands). — I propose that the addition to Art. 29 of the paragraph (e) should read "Having been incapacitated for duty for eight months (even if not consecutive)", etc..

M. Albert (I. H. B., Secretary to the Committee). — Referring to the provision for half pay for four months, a Secretary General could not be reduced to half pay every time he were absent for a fortnight owing to having a cold, for instance.

After further discussion, it having been decided that a Director should be allowed sick leave with six months "full pay and six months" half pay,

A vote was taken on the same question with relation to a Secretary General.

5 Delegates voted for the Bureau amendment and

5 Delegates voted for the amendment of Captain Luymes.

Commandant Gerken (Chile) said that he would abstain.

Captain Schweppe (Germany) said it was impossible to adopt Captain Luymes' amendment with regard to a Secretary General but not for a Director.

Captain Luymes (Netherlands) hoped to come back to the subject.

The Chairman. — If no decision can be come to in the Committee, the matter must go to the Plenary Session.

Commander Brandon (Great Britain). — I am of the opinion that it is illogical to adopt a resolution which would be on totally different lines to that concerning the Directors.

MM. Fichot (France) proposed that the two provisions should be examined anew.

Commander Brandon (Great Britain). — I further propose that the question should be examined anew with the Representative of the League of Nations, should he return.

The sitting adjourned at 1805.

CHAPTER III.

The third meeting of the Committee was held at 1530, on Saturday, October 30th, 1926.

LEAVE OF DIRECTORS AND SECRETARY GENERAL (cont.).

The **Chairman**. — The meeting is open. I would draw your attention to Art. 29. By adopting the Bureau's proposal concerning Art. 22 (vi) and (vii) yesterday morning, this Committee has, in principle, adhered to regulations as to leave and payment in case of illness of the Directors. The honourable Delegate of the Netherlands now proposes a change in the Bureau's proposal respecting the Secretary General, Art. 29, and if that proposal of the Netherlands Delegate is accepted we shall have to change the wording of Art. 22 (vi) and (vii) as well. The Chairman of this Committee therefore proposes to vote on:

- I. The wording of the Bureau's proposal Art. 29 (e) and (f); shall it be adopted or not?
- II. If it is not adopted, the Netherlands Delegate is requested to propose new wordings of both Art. 22 (vi) and (vii) and Art. 29 (e) and (f) for discussion.

Captain Luymes (Netherlands). — I have said with regard to Art. 22 (vi) and (vii), that the drafting of the first seems to be defective. A Director who has been incapacitated from duty for eleven months and returns to work for the twelfth month and is then ill for another period of eleven months might be incapacitated practically the whole time and yet go on being a Director. I recommend therefore that a Director having been incapacitated from duty for more than twelve months, even not consecutive, shall automatically cease to be a Member of the Directing Committee and I think it would be better to suppress entirely the part referring to full pay and half pay. In the same manner I should like to have an article regarding the Secretary General as we suggested yesterday.

The **Chairman**. — Yesterday we said that incapacitation from duty for twelve months should also hold good for the Secretary General.

Captain Fablet (Argentine). — It seems to me that we have already discussed Art. 22 (vi) and (vii). We have voted on it and voted after discussion on it with the Representative of the League of Nations. We cannot come back to it again at the request of a Member who was absent. This Article regarding the Director has been settled. If we always come back to what has been decided, we shall never finish our work.

The **Chairman**. — The supposition was that we might bring this up before the Plenary Session.

Captain Luymes (Netherlands). — I have stated that the fact that I was not present was due to defective organisation. I drew attention to this when I first came to this Committee. This has now been changed. It is true that a majority vote was taken on this article and accepted in the presence of the League of Nations Representative, but in all modesty I think a new light has been thrown on this question. I thought the question was put off until

the League of Nations Delegate was again present and I should not oppose such postponement or reference to the Plenary Session.

Captain Schweppe (Germany). — I do not think we know when the League of Nations Representative will come back, it might not be until the end of next week and this is an important matter. We all agreed that the Secretary General of the Bureau should be treated equally with the Directors. We had adopted Art. 22 (*vi*) and (*vii*), and we now begin to confuse the question of Directors and Secretary General. I think the best would be to agree that the same rules as have been adopted with regard to the Directors shall apply for the Secretary General.

Captain Luymes (Netherlands). — Yes, and we should postpone it.

Captain Schweppe (Germany). — Why postpone it? We can take a Resolution here in Committee. We can vote on it.

The Chairman. — It is necessary to close this question. The essential thing is to have the same rule for the Directors and for the Secretary General. Does anyone object?

Commander Gerken (Chile). — I wish to expose my idea. I agree with the Delegate for the Netherlands that we have to come back to this question. In the second sitting of this Committee I proposed that all that was approved should be considered as having been approved after a first reading, because in all Committees proposals are always approved in first reading; I think we shall do well to come back to this and bring it before the Plenary Session. My proposal was not to put it to the vote. At the second meeting on the 28th October 1926, my proposal was not put to the vote. Twelve consecutive months is too much. The work of the Bureau will suffer under such long leave.

M. Fichot (France). — There might be a solution to this, and that is that we should decide to apply to the Directors that which applies to the Secretary-General. We would merely take a decision of principle, and on some other occasion at a Plenary Session we could see whether the rules with regard to the Directors or those with regard to the Secretary-General should be changed.

The Chairman. — Has anyone anything to say about that? (To Commander Gerken). You have expressed your agreement with Captain Luymes, have you not?

Commander Gerken (Chile). — Yes, I agree.

The Chairman. — That this paragraph should be brought into conformity?

Captain Luymes (Netherlands). — That was my proposal.

The Chairman. — What do you call it?

Captain Luymes. — To come to an agreement.

The Chairman. — I think we can come to the conclusion that this point should be brought into conformity with that concerning the Directors.

M. Albert (I. H. B., Secretary to the Committee). — Art. 29 (*e*) is to be brought into conformity with Art. 22.

QUESTIONS REQUIRING A SECOND READING.

Captain Fablet (Argentine). — The Chilean Delegate raises a question here. Are we going to vote on it or not?

The Chairman. — It may not be necessary to vote.

Captain Fablet. — Are we going to adopt Commander Gerken's proposal to have a second reading or not?

Commander Gerken (Chile). — First I understand that if we find a decision which we have made before is wrong, we can return to it.

M. Albert (I. H. B., Secretary to the Committee). — From what Captain Gerken told me yesterday, I think he wants a second reading in order to correct the wording in case it is not satisfactory.

The Chairman. — That was arranged, yes. Vote on the second reading.

Captain Luymes (Netherlands). — Whether we will have a second reading or not.

Commander Gerken (Chile). — I said yesterday that my proposal to have a second reading was so that we could come back again. That is the meaning, I think.

Captain Fablet (Argentine). — I understand a second reading is only to find out if the wording decided on is correct or not; but anyway it will mean reopening the discussion on what has already been approved by a majority.

Captain Luymes (Netherlands). — I propose we should vote on Captain Gerken's proposal to have a second reading.

The Chairman. — There are different conceptions with respect to Captain Gerken's meaning. Some think it means that the coming back is only to correct the first wording, but Captain Gerken means, I understand, that we can reopen the discussion, and that is another thing.

Commander Gerken (Chile). — We are now in this position: we have found that part of what we were discussing is not in accordance with Article 22, with the matter on which we have voted. I think that was the meaning of the Conference in Geneva, that what we had was the first reading, and we have a second reading to approve what we have already discussed.

Commander Brandon (Great Britain). — I propose that we put this matter to the vote. We have spent half an hour on what is, after all, only a question of procedure, and I cannot believe, if we go on in this way, that we shall ever reach any conclusion at all, even at the date given by M. Fichot in a speech the other day, namely Christmas.

The Chairman. — I should prefer very much to adhere to Captain Brandon's proposal, but there are some objections to that, because the discussion shows very great interest in these matters, and one has to some extent to hear different opinions. I ask Captain Gerken, do you think that you can be satisfied with my proposal, namely that we bring Art. 29 (e) into conformity with that which we have adopted for the Directors?

Commander Gerken (Chile). — Then the Article will be as follows: "Having been incapacitated for duty, he shall receive full pay for six months and half pay for six months and automatically cease to be Secretary General at the expiration of the twelve months".

The Chairman. — Yes.

Commander Gerken (Chile). — I am against it.

Captain Luymes (Netherlands). — That it is not the question which is to be decided at the moment. It has now to be decided whether we have a second reading or not. I agree with Commander Brandon that we should vote now; we cannot waste time on this. I would propose to put to the vote whether the second reading should mean that we can reopen the discussion only if a new argument has been put forward.

Captain Schweppe (Germany). — I agree.

Professor de Buen (Spain). — I think the whole matter is one of procedure on which the Committee is competent to take a decision, and I propose that we should adopt the following solution.

A drafting committee should be appointed, composed of the Chairman, the Vice-Chairman, the British Delegate and the Delegate for Chile. This drafting committee should go over all the decisions taken by the Committee, examine the wording, to see if there is any contradiction, and if the drafting Committee

agrees that there is any contradiction, they can bring the matter before the Committee, and the Committee will probably, in agreement with their proposal, proceed to change the wording.

The Chairman. — Does anybody support that proposal?

Commander Gerken (Chile). — I only wish to say that the procedure suggested by the Spanish Delegate is that adopted in every Committee.

The Chairman. — I think that must be brought before a Plenary Session. We must drop this matter now.

Commander Rasikotsicas (Greece). — I agree with Captain Brandon's proposal to put to the vote the question of procedure raised by Captain Gerken.

Commander Schweppe (Germany). — I understand that there are two proposals, one by Captain Gerken and the other by the honourable Delegate of Spain. We have to vote on those two proposals, I think.

Captain Luymes (Netherlands). — I propose that a limit of two minutes shall be placed on speakers.

Commander Brandon (Great Britain). — Two minutes and only one speech.

M. Fichot (France). — With regard to the second reading I would make a reservation. I would agree to the second reading on the understanding that only such questions should then be discussed as were explicitly reserved for such second reading.

Commander Brandon (Great Britain). — I support that.

The Delegates of the Netherlands, Greece, Argentine and Brazil also supported M. Fichot.

The Chairman. — There are four matters to be put to the vote:

1. Second reading relative to wording.
2. Second reading with discussion in case of new arguments. Restriction of time to two minutes.
3. Drafting Committee.
4. That second reading should be reserved only for those questions which are explicitly designated by the Committee for a second reading.

Commander Gerken (Chile). — Which questions are now reserved to second reading by the Committee?

M. Fichot (France). — In my opinion the questions at present reserved for a second reading are those that concern illness and leave of the Directors and the Secretary General.

Commander Brandon (Great Britain). — I think Art. 6 (iii) and Art. 22 (2) are the only proposals which were deferred for further consideration.

The Chairman. — We will now vote on the proposal:

Second reading limited to those questions that were explicitly reserved by the Committee for a new examination.

(This proposal was adopted by 11 votes).

REELIGIBILITY OF THE SECRETARY GENERAL.

The Chairman. — We will reopen the question when we come to the Article in the Statutes. We pass to Art. 31. It is proposed to change "He is eligible for re-election" into "He may offer himself as a candidate for the Secretaryship at the next election". I think it preferable, though not very important, to use the words "for a General Secretaryship" in order to point out that we are dealing with the Secretary-General.

Captain Luymes (Netherlands). — I do not agree with the proposal of the Bureau. In my opinion the right to nominate candidates is the exclusive right of the States Members. A candidate should not nominate himself or be nominated from the Bureau by his own chief.

Captain Schweppe (Germany). — I do not think any Secretary-General would nominate himself without the consent of his country.

Captain Luymes (Netherlands). — It is unlikely, but it might happen. I draw your attention to the comment of the Bureau there it is stated :

“ The present article leaves doubt as to whether the Bureau will simply have to collate the lists it receives from the States Members, or whether it may insert the names of eligible Directors, and that of the Secretary-General, as candidates on the respective lists ”.

In my opinion the present article leaves no doubt whatever. It is clear that neither the Directors nor the Secretary-General have the right to present themselves as candidates. They can ask their countries; that is another thing; but, according to the present Statutes, the Bureau has only to collate the lists received from the States Members. But I think it better to postpone that point till we can discuss the whole subject.

Captain Schweppe (Germany). — I agree to your proposal to postpone it.

Commander Brandon (Great Britain). — I agree with Captain Luymes as to postponement, but do not see any necessity for alteration in the existing wording.

The Chairman. — It seems to me that the explanatory note covers the essential point when it says that the Secretary-General cannot be eligible for re-election because he is chosen by the Directors from three candidates elected at the Conference.

M. Albert (I. H. B., Secretary to the Committee). — He is not elected.

Commander Brandon (Great Britain). — He is elected in the first place. It does not matter however.

Captain Luymes (Netherlands). — He is eligible as candidate at the next election. That is quite as it should be.

Commander Brandon (Great Britain). — I propose a vote on the following wording :

“ He may be nominated as a candidate for the post of Secretary General at the next election ”.

(This proposal and wording were adopted).

The Chairman. — The next is Art. 43 (b) “ If ‘Frenchs francs’ (paper) is changed into ‘francs gold’, the sums will about be as originally intended. This amendment is therefore proposed by the Directing Committee”. I think that does not give rise to any discussion.

PROPOSAL FOR THE REDUCTION OF THE CONTRIBUTIONS (*appointment of a sub-Committee*).

The next, 34 (a) (iii) and (b) is one of the most important points which we have to deal with.

The Netherlands proposes :

“ to diminish the contributions of the Associated States by 10 % and to demand from States, which are admitted after the Conference, an entrance fee which represents the same part of the capital of the Bureau as its contribution to the total sum of the contributions of the States Members ”.

M. Albert (I. H. B., Secretary to the Committee). — The second part has already been adopted.

Commander Brandon (Great Britain). — There is only the question of a 10 % reduction to be dealt with.

The Chairman. — This question is very important. I have an idea that the financial state of the Bureau must be very good when such a proposal is made, without mentioning the necessity of reducing the salaries of the Directors and Secretary-General. A reduction can be made in various ways. I should be obliged if Captain Luymes would explain this proposal.

Captain Luymes (Netherlands). — I wish to ask, Mr. Chairman, if your idea is to deal at the same time with the statements of the two Directors at the end of the "Proposals". I think we must take them together, but we have a Finance Committee, and although, I am afraid, you will think I am always wishing to postpone things, I think it perhaps advisable to get the opinions of that Committee and discuss the matter in a joint meeting of the Finance Committee and this Committee.

The Chairman. — The proposal of the Netherlands on page 130 is very closely related to the statement of the President of the Directing Committee on the financial status of the Bureau. I entirely disagree with it, but I find myself not quite neutral, because I am a candidate. I might therefore not be regarded as impartial, so I propose to vacate the chair in favour of the Vice-President, and express myself simply as a member of this Committee.

Captain Schweppe (Vice-Chairman) *here took the chair.*

The Vice-Chairman. — I agree largely with what the honourable Delegate for the Netherlands has said. I am of opinion that it is quite impossible to discuss this question without knowing the opinion of the Finance Committee. I propose the formation of a small sub-committee to communicate with the Finance Committee.

Commander Rasikotsicas (Greece). — I think this is a question which may be settled at once, and that there is no need for postponement. We find on page 13 of the Statutes a total of 236,000 frs paid. If we deduct Belgium, which figures with a contribution of 8,000 francs, and then, on the other side, we take account of the augmentation of the contributions of China (4,000 frs.), the United States (10,000 frs.), France (2,000 frs) and Holland (2,000 frs), and likewise take into consideration the new membership of Poland (4,000 frs), we have a total increase of 22,000 francs. The contribution of Germany (16,000 frs) increases this to 38,000 francs. The total of contributions, deducting that of Belgium, is now 228,000 francs. With the total augmentations of 38,000 francs., a grand total of 266,000 francs is reached. Deducting from that 26,600 frs., which is 10 %, the income will still be 239,400 francs. It is obvious, therefore, that even after the proposed reductions, the income of the Bureau would increase from the 1st of January 1927. I am not in favour of this proposal, however, because the reduction of 10 % in the contributions of the States would not be of great advantage to them though it would be of great importance for the work of the Bureau.

M. Fichot (France). — While I feel sure that the figures furnished by the Delegate of Greece are correct, I think this is not merely a question for the Statutes Committee, but rather one for the Finance Committee. I am in favour of establishing contact with this Committee.

The Delegates of Brazil, Argentine, Great Britain and the Netherlands supported Mr. Fichot.

A vote was taken on the proposal to appoint a sub-Committee.

The proposal was adopted by 11 votes, and it was also agreed that the sub-Committee should not consist of more than 4 members.

The Delegates of the Netherlands, Great Britain, Spain and Chile were appointed to the sub-Committee.

It was agreed that Captain Schweppe should be its Chairman.

Captain Björset *here resumed his Chairmanship.*

REVISION OF THE TABLES OF TONNAGES.

The Chairman. — We now come to Art. 34 (b). The Bureau proposes to make certain changes in columns 3, 4 and 5. I think that is very easy, as we have information for our records from the various States. The tonnage has been augmented, and that was influenced by the Conference.

Captain Fablet (Argentine). — With regard to 34 (b), the figures are subject to periodical changes and it would therefore be better to refer to them in an Appendix.

Commander Rasikotsicas (Greece). — Pages 136 does not contain Poland and Germany.

REFERENCE TO A SUB-COMMITTEE OF THE STATEMENTS OF THE DIRECTORS.

Captain Luymes (Netherlands). — I am sorry to come back to what we have already discussed, but if the sub-Committee deals with the statements of the Directors, would it not be wise to treat also another proposal that has been made with regard to the Secretary General, the proposal that the post of Secretary General should be abolished, and that the post will be only a Secretaryship; that the Secretary would not be elected from candidates proposed by the Conference, but that the Directors should be free to choose a Secretary in accordance with their own views, Perhaps you think it better to deal with that when we come with our report to the sub-Committee, but we must not forget it.

Commander Brandon (Great Britain). — I suggest we include the whole of this matter in the work of the sub-Committee.

Commander Brandon's *proposal was adopted*.

Captain Luymes (Netherlands). — Does the Secretary attend that Committee? The Chairman. — I think that we must choose when it is formed.

M. Albert (I. B. H., Secretary to the Committee). — I have at hand all the figures and information which may be required and I am the accountant of the Bureau.

The Chairman. — We will be content with that.

Captain Luymes (Netherlands). — I should greatly appreciate it if M. Albert would fill that post.

REVISION OF THE TABLES OF TONNAGES (cont.).

Commander Gerken (Chile). — I would remind the Committee that a proposal had been made to place the dispositions of Art. 32 (b) in an Appendix. Has this proposal been adopted?

The Chairman. — These two Tables, Art. 34 (b) and 35 (a) are to be added to certain Appendices.

Commander Gerken (Chile). — Would 34 (b) and 35 (a) be included in the Appendix?

The Chairman.. — Yes.

M. Fichot (France). — I would draw attention to the fact that in Article 34 (b) we have an introductory part which determines the number of votes allocated to each member for the election of the Directors and Secretary General. I suggest that we should leave the first part and add: "for figures refer to the Appendix".

Commander Gerken (Chile). — I believe it has been agreed to put these tables in the Appendix. I wish to point out that they are very important tables, because they refer to the number of shares and contributions of each country; the new adhesions should be put in the Appendix in the same way as those at the beginning of Art. 2, because the Secretary General might perhaps be authorised to change the list as required by new adhesions. That is important from my point of view, because Directors are not now authorised to make changes till a future Conference, for that reason I say that it is very important not to leave the tables in the place in which they are.

Captain Schweppe (Germany). — I do not think you are quite right in your opinion. The Directing Committee is obliged to change those figures on the announcements which come from the different Governments. A Government whose contribution has been increased reaches another place in the table, and the Directing Committee is obliged to change that.

Commander Gerken (Chile). — I really wish to know whether the Directors can change it. The tonnage of each Member may be revised at the Conference, and we have to deal with that now.

Captain Schweppe (Germany). — I agree.

Commodore Reinius (Sweden). — I also agree with Commander Gerken that this table is of great importance to the different countries and I think that these tables must be in the text, they can be changed at the periodical Conferences, for then it is a very easy task, I think, to change them.

Commander Gerken (Chile). — I ask the Chairman not to close this discussion or vote upon it until the point is quite clear.

Captain Luymes (Netherlands). — I should like to remark that the Appendix to the Statutes is also a part of the Statutes. You have only put it in another place in the Statutes, but the same rules that govern the Statutes govern all the Appendices, in my opinion.

The Chairman. — Of course, an Appendix is not in an inferior class to the rest.

Commander Gerken (Chile). — I regret that I do not agree with the honourable Delegate of Holland. The Statutes cannot be altered. Directors have not the right to change anything whatever in the Statutes. Nevertheless, we have voted Art. 2. The Secretary General has the right to change the Appendix.

Captain Luymes (Netherlands). — I did not know; I was not present during the discussion.

Commander Brandon (Great Britain). — I suggest that we defer this discussion and ask the Secretary of the Committee to find a wording which would enable us to put these tables in the Appendix while still safeguarding the point of view of Commander Gerken, because arrangements must be made to enter in this table any new State which adheres to the Bureau and to remove any State which leaves the Bureau. Therefore, this table has to be revised periodically, not only at Conferences, but between Conferences.

Commander Gerken (Chile). — In that case I think that we are obliged to change Art. 37, that is that the new proposition of modification must be presented by three Members and accepted by the President.

Commander Brandon (Great Britain). — Art. 37 deals with tonnage. My remarks referred to new States joining the Bureau and States leaving the Bureau.

Commander Gerken (Chile). — I think there is a misunderstanding. I do not speak of countries leaving or entering. I have spoken about this before, referring to page 13 of Statutes.

Commander Brandon (Great Britain). — If States enter or leave the Bureau that table has to be revised as we are now proposing to revise it, and it cannot be left to the next Conference. If a State enters the Bureau immediately after this Conference, presumably its shares will have to be laid down as from the date of its entry and that should appear in this table, which will no doubt be proposed by the Bureau to the States Members and sanctioned by them. I merely propose that some wording should be adopted which would cover the principle mentioned by Captain Gerken, with which I entirely agree.

M. Fichot (France). — At first sight I was inclined to accept the placing of these tables in the Appendix, but I have come to the conclusion that these tables are really different from those in paragraph 2, where we have one list which is merely historical, and others which mention the States Members that have since entered and those that have gone out, evidently here one can base oneself on facts, and the tables can be modified without the approval of the Conference.

For this article on the contrary, the Tables in question have a considerable statutory importance, because they fix, according to the tonnage owned, the amount of the contributions and the number of votes of the different States Members. I consider therefore that they cannot be modified except by Plenary Session.

Captain Schweppe (Germany). — It seems necessary to close this discussion. I should like to ask those Members who do not at present agree with the proposal of the Delegate from Chile, to postpone their consideration of the point.

Commander Brandon (Great Britain). — I propose that we put the matter to the vote.

Commander Rasikotsikas (Greece). — I support that.

Commander Gerken (Chile). — I wish to point out that all that has been said during this sitting has been laid down in Articles 36 and 37. It is quite clear because Article 36 says :

“ Should a Possession of a Member be or become a Member of the League of Nations as a separate State and elect to be treated as such by the Bureau, the tonnages, and consequently the table of contributions and votes, will be adjusted by the Directing Committee in accordance with information obtained from the Governments concerned ”.

Commander Brandon (Great Britain). — I think that that Article refers only to possessions or colonies. I cannot see that it covers the whole of the discussion.

Commander Gerken (Chile). — I wish to continue the discussion at the next meeting.

Commander Brandon (Great Britain). — I would prefer to vote.

M. Albert (I. H. B., Secretary to the Committee). — Commander Brandon proposes that the Secretary of the Committee shall prepare such a wording as will allow these tables to be placed in the Appendix without in any way compromising the point of view of Commander Gerken.

Commander Gerken (Chile). — I suppose we have to leave it just as it is. I cannot understand how it will be arranged. It is very difficult.

Captain Schweppe (Germany). — My proposal is that the manner in which it should be adopted we leave as it is now.

Commander Brandon (Great Britain). — You mean that we accept the proposal of the Bureau.

Captain Schweppe (Germany). — To change the data, which must be changed, because the facts have been changing since the adoption of the Statutes. I do not think it is necessary to waste more time on this. I propose that we leave it all in the state in which it is now.

Captain Schweppe's proposal was adopted by 12 votes.

The sitting adjourned at 1750.

CHAPTER IV,

The fourth meeting of the Committee was held at 1430, on Tuesday, 2nd November 1926.

DATES OF ISSUE OF ANNUAL REPORTS AND OF ESTIMATES.

The Chairman. — Gentlemen, we have now reached Art. 45 (a) — the text is to be changed into :

“ In the month of January of each year or when the Auditor of the League of Nations has made his Report, the Bureau will publish an Annual Report on its Administrative work and finances ”.

The proposal is that the whole wording of the Statute should be altered.

You see there is a difference, as the original Statute mentions the following five points :

- (i) internal organisation,
- (ii) personnel,
- (iii) offices,
- (iv) correspondence during the preceding year, including a list of the Circular-Letters of that year,
- (v) finances.

and Par. (b) is also included. The five points are deleted. Has any one any suggestions to make ?

Captain Schweppe (Germany). — I think that we can avoid changing the text. I do not think it necessary to change the whole of Art. 45 but merely to add the words “ when the Auditor of the League of Nations has made his Report ”. That is what I propose.

The Chairman. — You mean that the original text should be kept “ *in extenso* ”.

Captain Schweppe (Germany). — Yes, I propose that the Article should read as follows :

“ In the month of January of each year or when the Auditor of the League of Nations has made his Report, the Bureau will publish... ”.

and the remainder of the original text will stand as it is. That is exactly the same thing as the Bureau proposes and means that we need not change the whole text of the Article.

The Chairman. — There is no great difference, and if nobody objects we can adopt Capt. Schweppe's proposal.

Commander Brandon (Great Britain). — I do not want to delay the proceedings but I cannot help thinking that the Bureau had some object in view in proposing to suppress all these details, and personally I cannot see why the Report on the Personnel need be rendered. It cannot interest the States Members to know whether each individual typist of the Bureau is considered efficient or not. They assume that the Bureau would engage an efficient staff, and I think the Report on Personnel is certainly a waste of everybody's time.

The Chairman. — Are there any further suggestions ?

Captain Luymes (Netherlands). — I see the point of Commander Brandon's argument and I agree with him. I do not think all those things are necessary, but I would suggest deleting from the proposal of the Bureau the word

"administrative". I have said before that the Bureau lays too much stress on separating the administrative and the technical work. It would suffice to draw up a Report on the work and finances of the Bureau and adopt the proposal of the Bureau with regard to the League of Nations.

Captain Schweppe (Germany). — I agree with Captain Luymes' proposal.

Commander Brandon (Great Britain). — I also.

Captain Fablet (Argentine). — I have no objection. Then we have to cancel (ii) in Article 45, change (iii) to (ii), (iv) to (iii) and (v) to (iv).

The Chairman. — No the word "administrative" must be removed.

Captain Schweppe (Germany). — In any case, this is not a very important point and I agree with Captain Luymes. We will simply delete the word "administrative".

M. Fichot (France). — All other technical work is provided for in Article 46; that is why the administrative work is also referred to here.

Commander Brandon (Great Britain). — I think that the idea of Article 45 is to have a review of the work of the Bureau covering the whole year, a summary as it were, whereas Article 46 refers to the issue of more detailed reports on particular subjects.

The Chairman. — The conclusion of this discussion is that the Bureau's proposal with deletion of the word "administrative" be adopted. Are there any objections? None, then it is *adopted*.

URGENT PUBLICATIONS.

We now go to Art. 46 (b) (Page 134). Here it is proposed to add the words "as a special publication". The Bureau thinks no comments are needed.

Captain Schweppe (Germany). — The Bureau takes this as a matter of course. It is not necessary to add these words.

Captain Luymes (Netherlands). — I should prefer that the Review had a non-periodical character and was published when there is sufficient matter of interest for a volume or matter of an urgent character. The republication of matter which has been edited in a Special Publication is expensive and has no advantage. I propose that we should not adopt the proposal of the Bureau in this case.

Commander Brandon (Great Britain). — I do not think either that it is necessary to add these words.

The Chairman. — Then we need not take any notice of it. We can remove it. Any objections? Then the proposal of the Bureau is *rejected*.

ESTIMATES (cont.).

Art. 48 (ii):

"Delete the paragraph"

"In connection with the change of Art. 45 (a) this article becomes redundant".

Do you agree that it is superfluous?

Captain Schweppe (Germany). — I do not think this Chapter VIII of Statutes is very happily worded. Perhaps you could make it better by placing the old Art. 48 at the end of Art. 45 and calling it Par. (c). I think the two belong logically together, and the only difficulty is that afterwards we shall have no No. 48.

Commander Brandon (Great Britain). — It upsets the sequence.

The Chairman. — Any suggestions?

M. Fichot (France). — I had intended to make the same objection, but hesitated because of a change in numbering which would result from such a decision. I propose therefore that things should be left as they were.

The Chairman. — The Statutes will have to be reprinted in any case. **M. Fichot (France).** — I do not insist.

Captain Fablet (Argentine). — I think it is understood that Art. 48 (i) should become paragraph (c) of Art. 45, that the second part of Art. 48 being suppressed, the whole of Art. 48 would be cancelled, and that Art. 49 would therefore become Art. 48, and so on, the number of each of the following articles being reduced by one unit.

The Chairman. — Yes.

This was adopted.

APPOINTMENT OF COMMITTEES BY CONFERENCES.

The Chairman. — Art. 55 (a).

Change into :

“ Periodic Conferences will specially examine the reports of the Bureau as to its technical and administrative work and its reports on its finances since the last Conference. For this purpose, in their early stages, two or three small committees will be nominated, the conclusions of which shall be submitted to a plenary session of the Conference ”.

I should like to say only that “ small committees will be nominated ”, a few restricted committees.

M. Albert (I. H. B., Secretary to the Committee). — In the French text it says merely “ des Commissions ”.

The Chairman. — Then the French text covers what I mean.

Captain Luymes (Netherlands). — I would propose to make it still shorter. I would stop after the words “ last Conference ”, that is, delete the second sentence, and in the first sentence I would suppress the words “ technical ” and “ administrative ”.

M. Fichot (France). — The Conference will necessarily do this, and it will appoint Committees as now.

The Chairman. — I should not like to delete the words “ technical and administrative work ” because the work of the Bureau involves technical work and administrative work. The technical work is probably the most important from the point of view of the Directors and the administrative not less important from the point of view of the Secretary General, and I think it would be useful to name both sides of the work and point out that we are dealing with two sorts of work.

Commander Brandon (Great Britain). — I agree with Captain Luymes that it is unnecessary to specify the work. The whole of the work should be examined by the Conference. The wording should be: “ as to its work and finances since the last Conference ”. As regards the second sentence I agree that it is unnecessary, but there is no harm in it.

Captain Schweppe (Germany). — I agree with Captain Brandon, but I should like to propose, that we should delete in the second sentence the words “ two or three ” and say only “ for this purpose small Committees will be nominated ”.

Commander Brandon (Great Britain). — I quite agree.

The Chairman. — But this is in agreement with the French text. In the French text we have the words “ des Commissions ”. Do you agree to delete the words “ two or three ”?

Captain Luymes (Netherlands). — I think it would be better to suppress the whole second sentence. It is not necessary to state in the Statutes of the Bureau how the Conference is to proceed. And it is a minor point.

M. Fichot (France). — I think that all the texts which have just been examined state the same thing and would give the same result; therefore, I support the text which appears the simplest.

Commander Gerken (Chile). — I am of opinion that the second part should remain.

Commander Rasikotsicas (Greece). — I am of opinion that the second paragraph should not be suppressed, because it well shows that all the work of the Bureau must be controlled by the Conference. I propose therefore that this paragraph should be kept.

Captain Fablet (Argentine). — I am in agreement with Captain Luymes.

The Chairman. — Did Commander Gerken make another proposal?

Commander Gerken (Chile). — No, I merely gave an expression of opinion that the second part should stand.

Captain Schweppe (Germany). — Was Commander Gerken's suggestion the same as Commander Brandon's?

Commander Brandon (Great Britain). — There are two subjects under discussion, one is the wording of the first sentence, whether the words "technical and administrative" should be omitted, and the second subject under consideration is whether the second sentence should stand or not.

The Chairman. — As far as I can understand Captain Luymes, he thinks the two words should be omitted?

Captain Luymes (Netherlands). — Of course. I strongly oppose mentioning them here as it would lead to a totally wrong impression. The minimum work is administrative and the maximum technical and this looks as though they were equal.

Commander Brandon (Great Britain). — Shall we vote?

The Chairman. — Not yet. After hearing the last words of Captain Luymes this point seems to me to be most important, because he wants to differentiate between these two lines of work. It must be pointed out that the administrative work is very important and that is why at the head of the administrative work we have a Secretary General. I have always conceived that there should be a head of the administrative work who is a Secretary General and I believe it was decided at the London Conference that the administrative work should be examined, and I fancy it is also in accordance with the conception of M. Renaud.

Captain Luymes (Netherlands). — At the London Conference we spoke only of a Secretary and not of a Secretary General. Afterwards that was changed and now I think the Bureau is run in the same way as other offices. At my office only as much administrative work is done as is necessary, and no more. I deem it an important matter because, if we put those things on an equal footing, then the impression is given that the Secretary General will be on the same footing as the Directors. The organisation of the Bureau must be such that the Directing Committee has authority over the whole, and no more administrative work than is necessary must be done. The technical work must be the principal by far.

The Chairman. — I cannot agree with Captain Luymes. With regard to the word "Secretary General" I cannot say when exactly this was put forward, but all the letters I have received from the Bureau are from the Secretary General, and I always had the idea that the Secretary General was the head of the administrative work.

Commander Brandon (Great Britain). — May I say that the position of the Secretary General is included in the work turned over to the sub-Committee on Saturday. When that sub-Committee reports, this Committee will have an opportunity of discussing it further if necessary. This discussion is leading us too far. The Amendment proposed by Captain Luymes commends itself to me entirely, although I do not agree with his reasons. I suggest that we vote on it.

Captain Luymes (Netherlands). — On page 142 of the "Proposals", eight lines from the bottom it is stated :

"It is therefore proposed to return to the simple Secretary, without assistants, mentioned in the original draft Statutes, with whom the Bureau was managed during the first years of its existence".

Captain Schweppe (Germany). — I agree with Commander Brandon that we should vote.

M. Albert (I. H. B., Secretary to the Committee). — The Chairman puts the following to the vote :

"The periodic Conferences will specially examine the reports of the Bureau as to its work and its finances since the last Conference".

"Les Conférences périodiques examinent en particulier les Rapports du Bureau relatifs à ses travaux ainsi qu'à ses finances depuis la dernière Conférence".

Eight in favour of adopting the text, five against.

The text was adopted.

M. Albert (I. H. B., Secretary to the Committee). — The Chairman puts to the vote :

"For this purpose in their early stages, small Committees will be nominated, the conclusions of which shall be submitted to a plenary session of the Conference".

"Dans ce but, des Commissions restreintes sont désignées dans les premières séances, et leurs conclusions sont soumises à la Conférence en session plénière".

Eight in favour.

The text was adopted.

EARLY DESPATCH OF PREPARATORY REPORTS FOR CONFERENCES

The Chairman. — *Art. 56 (a).* The new text proposed is :

"This shall be despatched, together with the report on the technical and administrative work of the Bureau and its finances since the last Conference, mentioned in *Art. 55 (a)*, to the Members six months before the proposed date of meeting".

Then, we must cancel the words here also, and say only "report on the work". Do you agree? and is there anything to add?

Captain Fablet (Argentine). — I think that I ought to say that the same reasons cannot be applied, for *Article 56*, as those which have caused the suppression, in *Article 55*, of the words "technical and administrative". In fact, in *article 55* this suppression was made for Conference purposes, whereas the object of *Article 56* is to inform States Members, and they should also be informed as to the financial situation. It is important therefore, that in the wording of *Articles 56*, the words "administrative and financial" should be left, and I see no reason why the text should not be left as it is.

Commander Brandon (Great Britain). — I do not think it is a question of having a fuller or less full report, the text refers to the report mentioned in *Art. 55 (a)*. The report is one and the same.

The Chairman. — I agree absolutely with the Argentine Delegate.

Commander Gerken (Chile). — I am opposed to changing *Art. 55 (a)*. I think the Hydrographic Offices of the Members are obliged to have a report on the administrative work. This article fixes the work of the Bureau and if you delete it the Directors can do as they think fit. The Bureau should send reports on administrative and technical work. If the Directors wish to report on technical work only the Members cannot ask for reports on the administrative work.

Captain Schweppe (Germany). — I agree with the British Delegate that the words should be suppressed in Art. 55 (a), there we agree.

Commander Gerken (Chile). — But I was opposed.

Captain Schweppe (Germany). — We agreed to cancel the words "administrative and technical", if we now adopt the wording proposed here by the Bureau we must come back to Art. 55. I should not think that there is any danger that the Bureau would not inform us of every detail.

M. Fichot (France). — I consider that the words "technical and financial" can certainly be suppressed, in order not to establish any priority. It is evident that reports are made on both subjects. Therefore, without adopting the proposal suggested by the Argentine Delegate, the present wording can be made to agree with that proposed, and the States Members will get full information, for the reports will certainly apply both to technical and administrative work, which the Committee has joined together under the general term "Work of the Bureau".

The Chairman. — To be in conformity with what we have accepted we must delete the words here, otherwise we shall have to go back to Art. 55 (a).

Commander Brandon (Great Britain). — Shall we put it to the vote?

M. Albert (I. H. B., Secretary to the Committee). — The proposal on which the Committee is requested to vote is therefore the following:

Article 56 (a): for the last line, substitute:

"This, together with the Report on the work of the Bureau and its finances since the last Conference mentioned in Article 55 (a), shall be despatched to the Members six months before the proposed date of meeting".

Nine in favour.

The proposal is adopted.

SECOND READING OF THE RESOLUTIONS OF COMMITTEES.

Captain Schweppe (Germany). — I think that compared with other Committees we have got on well with our work and since the President of the Conference asked us this morning to expedite as far as possible the reports of the Committees, I propose that we should now take some time off and study all the proceedings and the Resolutions already adopted here. It is rather a voluminous piece of work, I tried to study them myself today after lunch, but am afraid I did not get very far. I should like to have the opportunity of discussing some of the points of these proceedings in the Committee here. I think we could get through the reading in an hour and then have time to proceed with our deliberations. We could then place the results before the Plenary Meeting.

Captain Luymes (Netherlands). — Mr. Chairman, I am not in favour of this proposal. One hour is not sufficient to go through all those proceedings; there are some slips in them and more time will be needed to study them thoroughly. We are now at Art. 59, and the last article of the Statutes is No. 65, I should prefer to proceed and go on to the end. We have always time in the evening to look at the Proceedings.

Commander Reinius (Sweden). — I agree.

Captain Fablet (Argentine). — I do too.

Commander Brandon (Great Britain). — I agree.

The Chairman. — The prevailing impression seems to be that we should go on. Then let us proceed.

Captain Luymes (Netherlands). — Art. 56 should also be applied by the Bureau. We should have had these "Proposals" in March and we only received them in August. I know there are excuses for the Bureau, but it should be a good thing to stress that the rule should be followed.

The Chairman. — I do not doubt that the rule will be applied by the Bureau.

REVISION OF THE TABLES OF TONNAGES AND VOTES (cont.).
APPOINTMENT OF A SUB-COMMITTEE.

Art. 59.

M. Albert (I. H. B., Secretary to the Committee) speaking in the name of the Chairman, said that the last resolution adopted by the Committee at the Saturday afternoon Session, consisted, in accordance with the proposal of the Bureau, of modifying the Tables of Art. 34 (b) and 35 (a).

On closer examination, it became very evident that the Table of Article 35 (a) could not be changed without completely modifying the sentence which preceded it, and which read :

(a) "The tonnages taken for the purpose of determining the first contributions of the States represented at the International Hydrographic Conference of 1919 were as follows :....."

This table, being a statement of fact could not be modified ; the Chairman therefore proposed to revoke the decision made on Saturday and to replace Article 35 (a) by the following article :

"Article 35. — The tonnages taken for the purpose of determining the contributions of the States Members are as follows : " (here followed the table).

This table, added the Secretary, should be brought up to date and completed, by mentioning the new Members, Poland, Germany and Egypt. On the other hand, Article 35 (b) should be suppressed. Belgium should also be expunged from the Table of Article 35.

Commander Brandon (Great Britain). — May I say that it was for this reason amongst others that I proposed that this Table should be relegated to an Appendix. I do not want to reopen the discussion, but the principle, I think, should be accepted by every one.

Captain Fablet (Argentine). — I consider that, concerning that disposition, there is an obscure point which should be elucidated.

The Plenary Session has decided that all resolutions made by this Conference shall be submitted to the various Governments represented. In consequence, for the election of Directors, for instance, the statutes should be applied, in their present form, without the intended corrections.

I consider that this would be inconsequent and, as a proof of my argument, I quote the case of Germany. This country puts up a candidate for the position of Director of the Bureau ; now, according to the Statutes actually in force, Germany cannot vote for a Director.

This situation gives rise to doubt and I would like to know whether the votes inscribed in the Table of Article 34 are actually the votes allocated, or whether the election will take place with the number of votes allowed by the corrected statutes.

I am of the opinion that there should be a fixed basis ; for, if the tonnage varies, the number of votes varies and so will the amount of contribution ; a standard should be established to which all variable quantities can be referred.

Although the British Delegate said that he did not wish to come back to this subject, I think that the present question is of real importance, requiring a practical solution. Finally I put the two following questions : 1st — should the United States, the number of whose votes has just increased, vote according to the number of votes allocated to them by the new or the old Statutes ? And 2nd — should Germany take part in the voting or not ?

Commander Brandon (Great Britain). — I entirely agree with Captain Fablet and I think this is an important point which has got to be cleared up.

M. Albert (I. H. B., Secretary to the Committee). — It was decided this morning at the Plenary Session that for the elections the present statutes would apply.

M. Fichot (France). — The point raised by the Argentine Delegate is certainly a very delicate one. It is not without cause that it has been asserted, this morning, at the Plenary Session, that the Conference cannot, at present, modify the Statutes in view of the coming election; it would indeed be contrary to legislative principles. One does not make laws for each occasion, one makes them in view of events the conditions of which are not yet fixed.

The States which have proposed candidates have done so in accordance with the old Statutes, and their decision might have been altered if they had foreseen that the Statutes were going to be modified in view of the election.

The case pointed out by the Argentine Delegate is a striking one, and such as should be dealt with in quite an impersonal way; States which had a definite tonnage at the last Conference, and consequently a fixed number of votes, may have increased their tonnage in five years. If therefore the Statutes could be modified, the number of votes appertaining to them would be increased. On the other hand, a State which enters the Bureau is awarded a number of votes according to the tonnage which it at present possesses, so that it finds itself in a better position than States which are already Members of the Bureau and whose tonnage has increased but whose number of votes has not been augmented.

I think that this is a very delicate question and rather difficult to decide in Committee, but one which should eventually be brought forward before the Plenary Session. I admit that I cannot see a clear solution. Though it would be excessive to deprive a State, which enters the Bureau and is formally admitted, of all right to vote (which would be impolite) yet, on the other hand, it must be admitted that this State comes in with an advantage over those who are already Members of the Bureau, if a number of votes corresponding to its existing tonnage be allotted to it.

Captain Schweppe (Germany). — I agree with what the Delegate of France has said, and I must say that I am glad that the Delegate of Argentine has drawn our attention to the lacuna in these Statutes. If a State joined the Bureau in 1922 it would not appear in these Statutes until the Conference, and would not be able to vote. Therefore the Statutes are wrong. It is natural that any State Member should be able to vote at the Conference.

M. Fichot (France). — I must admit that this was not foreseen.

M. Albert (I. H. B., Secretary to the Committee) stated that according to the Statutes, Belgium could still vote.

Captain Fablet (Argentine). — I thought it useful to put the question in order that a decision might be come to, and having put the question, I think I can suggest a solution so that the rights of the States which have entered the Bureau since the last Conference would not be injured.

It seems to me that there should be left in the Statutes a basic article, a standard, for the questions of voting, tonnage and contribution. Further, there must be kept up to date an Appendix showing the Nations who enter the Bureau, who leave it, or who augment or diminish their tonnage. It is the only way to keep the Statutes up to date and to avoid depriving the Powers who enter of their right to vote which is their due.

Captain Luymes (Netherlands). — I do not agree with Captain Schweppe, for changes can be made in the Statutes, between the Conferences, according to Art. 61 (b) and (c) and as is proved by the addition to Art. 43. The difficulty we are in is that this morning the President of the Conference said we should hold these elections according to the Statutes as they actually are, and that it appears now that in that case there can only be votes allowed to the Members that were such in 1923.

M. Fichot (France). — I would point out that the question is to know whether, in the present voting, one votes with to-day's tonnage or with that of five years ago. If one votes with the original tonnage, the new Members,

whose tonnage may have increased, would have a certain advantage over States who are already Members of the Bureau and who would only vote with the tonnage of five years ago.

I think that, in order to put everybody on the same footing, States should be allowed to vote with their present tonnage. I consider that a vote on these lines could give rise to no objection.

Commander Brandon (Great Britain). — This seems to me a matter for a small drafting sub-Committee. As far as I can see at present, in view of the ruling given at this morning's Plenary Session and the fact that these Tables are being retained in the Statutes, we are absolutely tied up and cannot make any progress until some suggestion can be worked out by a small sub-Committee which would do justice to the various arguments put forward.

The Chairman. — Is every one in favour of the sub-Committee?

Commander Brandon's proposal was carried by thirteen votes.

Commander Brandon (Great Britain). — May I propose the name of the Hon. Delegate for the Argentine, who pointed out this difficulty in the first place, as a Member of the sub-Committee.

The Chairman. — Is anybody else willing to serve on this sub-Committee?

I propose four gentlemen to be Members of this very important sub-Committee. Captain Luymes, Commander Brandon, Captain Fablet and Commander Rasi-kotsikas.

Mahmoud Bey Bayram (Egypt). — Three or five Members would have been better.

Captain Luymes (Netherlands). — Three Members I think would be enough.

The Chairman. — I will put three names in the first place. The Delegates of Argentine, the Netherlands and Great Britain will constitute the sub-Committee.

M. Albert (I. H. B., Secretary to the Committee). — What will be their work?

The Chairman. — To work out the whole problem.

M. Albert (I. H. B., Secretary to the Committee). — Shall we say to re-word?

The Chairman. — Yes, to draft a new wording.

Commander Brandon (Great Britain). — To make a recommendation to the Committee in regard to a new arrangement of Articles 34 and 35.

Captain Luymes (Netherlands). — I propose that the Chairman of this Committee should draw the attention of the President of the Plenary Conference to this difficulty.

M. Albert (I. H. B., Secretary to the Committee). — The only difficulty is the decision made this morning.

Captain Luymes (Netherlands). — But that is serious enough.

Professor Tenani (Italy). — I would direct your attention to the fact that, the Directors having the right to revise the tables, the Committee ought to enquire whether this revision has been carried out.

Captain Luymes (Netherlands). — They have made them for the other countries.

Commander Brandon (Great Britain). — May I say that I think it is not impossible to find a solution that will meet all objections. The scale of subscriptions is clearly laid down in Art. 34 (a), and that is quite independent of the subsequent tables. As regards Art. 35 (a), that is only a statement of historical fact; it is not required here. I do not think it binds us to exclude

States not there mentioned. In the same way I think the other table shows how the scale is to be applied, but it is to be regarded rather in the light of giving examples than of being an exhaustive and final list of the contributions of the States and their votes.

M. Fichot (France). — I fear that if the Conference is of opinion that all the States should vote for the election of Directors with their present tonnage, a difficulty might result, namely that the rule would apply to any State, whether it had just entered the Bureau as a new Member, or whether it had been a Member for a certain time.

The Chairman. — This question has been settled so far as I can understand in that it should be dealt with by a small sub-Committee. I do not think that we can go on discussing it now. Is that agreed?

(This was agreed).

We now come to Art. 59 (*iv*).

PREPARATION AND DISTRIBUTION OF LISTS OF CANDIDATES.

Commodore Reinius (Sweden). — As this proposal is not of great importance and our time is very short, I withdraw it.

The Chairman. — The proposal of Sweden which has been withdrawn is.

"The Bureau will then prepare two lists, one showing the candidates for the Directorships, and the other showing those for the Secretaryship, which lists with copies of the notes referred to in (*ii*) will be presented to each delegation at the opening of the Conference".

The Bureau proposed to add, after "Directorships": "(See also Article 24)" and after "Secretaryships": — "(See also Article 31)"

Captain Luymes (Netherlands). — I do not see that that removes the doubt which exists according to the explanatory note of the Bureau. According to my opinion the right to propose candidates for the elections ought to be the exclusive right of the States Members, and this should not be yielded to the Secretary General regarding himself, or to the Directors

The present Article 59 leaves no doubt as to whether the Bureau will simply have to collate the lists it receives from the States Members or whether it may insert the names of eligible Directors and that of the Secretary General as candidates on the respective lists.

On the contrary the Article states clearly that the Members propose the candidates and, from the fact that it is prescribed further that they must send the lists to the Bureau which has to prepare the general lists, it cannot be deduced that the Bureau should also have the right to insert some names on them.

The Chairman. — Do you propose that Articles 24 and 31 should be deleted?

Captain Luymes (Netherlands). — I propose for Article 59 (*iv*) "The Bureau will collate the lists of States Members" to take away any doubt which may exist.

Captain Schweppe (Germany). — I do not understand the real sense of the explanatory note of the Bureau. May I propose that the delegate of Great Britain should tell us what is the meaning? I never could imagine that Directors could put themselves on the lists as candidates, but that only the States Members should have the right.

Commander Brandon (Great Britain). — In reply to the Hon. Delegate of Germany, I can only say that I agree with his views, as to the way in which the names should be put forward, but on the other hand the only possible meaning of the note of the Bureau is that the possibility of the Bureau putting forward the names of the existing Directors or Secretary General has been considered by them, and that they think it a possible procedure. That

is the only possible meaning of the comment, that they do imagine such a procedure would be legitimate, and I imagine that the alteration they propose is intended to provide for that possibility, though I cannot see that it does so provide.

Captain Schweppe (Germany). — Then I think it is our duty in this Committee to express our meaning in that sense, that the Directing Committee has no right to put forward any candidate for a Directorship.

M. Fichot (France). — I agree with Captain Schweppe. I would remind you that the Statutes provide that the Bureau shall collate the lists forwarded to it. In such conditions, the lists are not drawn up by the Bureau, but they are a result of proposals made by the States Members. I therefore consider that there is no cause for a change.

Commander Brandon (Great Britain). — I agree with M. Fichot, but the fact that the Bureau has considered this possibility, and considered it within the limits of the Statutes, appears to show that the Statutes are not clear to everyone, and therefore I think it might be better to adopt the modification suggested by Captain Luymes.

Captain Schweppe (Germany). — It would be wiser to hear Admiral Niblack on that subject.

The Chairman. — Will you be so kind as to make a proposal. The proposal of Captain Luymes is to alter Art. 59 (*iv*), to:

“The Bureau will collate the lists sent by the States Members and present them to each Delegation at the opening of the Conference with copies of the notes referred to in (*ii*)”.

Is there any objection to that?

M. Fichot (France). — I suggest the wording: “The Bureau shall collate the lists forwarded by the States Members”, *etc...*

The Chairman read out the amendment as suggested by Captain Luymes and as further amended by M. Fichot.

(*Adopted*).

POINTS ALLOCATED IN ELECTIONS.

The Chairman. — We will pass on to Art. 58 (*vii*). Proposal to delete “The provisions of Article 59 (*a*) and (*b*) will apply”. I do not see any objection.

M. Fichot (France). — I would wish that the position of the Directors, with their respective seniority, should be definitely settled. I cannot admit that the Statutes should not state clearly which of the Directors should act as President in case of absence of the actual President, or for any other cause.

In my opinion, it seems that it should be the one who has recorded the greatest number of votes after the actual President.

There is a question connected with the one just mentioned. I would point out that the powers of the President are now here laid down in the Statutes. I think that the President alone has a right to sign official correspondence, in which the Bureau deals with a very important question. In this way, in case disagreement should arise between two Directors, neither of them would ever be in a position to transmit proposals to a State Member. It is therefore indispensable, in my opinion, that proposals of an important or official nature should bear the signature of the President of the Directing Committee, or of his substitute, should occasion arise. This priority not being defined in the Statutes, this is an omission which should be filled.

Captain Luymes (Netherlands). — I beg to remark that the explanatory note of the Bureau concerning its proposal to delete in Art. 59 (*vii*) “the provisions of Art. 58 (*a*) and (*b*) will apply”, brings to light that the election of the Directors and of the Secretary General are not organised in such a way that not more than one explanation is possible.

This note states "The articles mentioned cannot apply because the Directors are elected according to the number of points allocated to them, and the absolute or relative majority of votes is not expressed in this way". The consequence should be that the election of Directors is not subject to Article 58, which demands peremptorily an absolute majority at a first cast or a relative one at a second cast.

Now, with some good will, it is also possible to conceive of an absolute majority by election according to points: e. g. when 10 Members have jointly 100 votes the absolute majority for the President is 151 points, for the Acting President 101 and for the third Director 51. However, the proposed deletion annihilates this explanation.

According to my opinion the regular way is that the election of Directors (and Secretary General) be subjected to Art. 58 and to a majority of votes, whereas, the precedence only of the three Directors and of the candidates for Secretary General should be regulated according to *points*.

If this be accepted, I propose to change Article 59 from (*v*) to the end, but shall wait with a draft text till the principle be accepted.

My idea regarding the election of the Directors is that they are elected according to votes and that the points should only serve to define the precedence.

Captain Fablet (Argentine). — I did not understand the proposal.

The Chairman. — Is there anybody else who has not understood?

Commander Brandon (Great Britain). — The proposal is a little complicated. A possible way that occurred to me of getting over the difficulty that has arisen here was that the three Directors could be voted for in turn separately, first of all for the Presiding Director, then for the second Director and finally for the third Director, and the precedence would be settled in that way. It would very much simplify the elections, and the provisions of Art. 58 (*a*) and (*b*) would then apply.

Captain Luymes (Netherlands). — I, possibly, would not have come to this if the Bureau had not proposed to delete the provisions of Articles 58 and 59, and stated in the explanatory notes that the articles mentioned cannot apply. According to my opinion Art. 58 (*a*) and (*b*) must be applied.

Commander Brandon (Great Britain). — If you were to say the principle of Art. 58 (*a*) and (*b*) would apply, that would cover it, would it not? "The principle" instead of "the provisions".

Captain Luymes (Netherlands). — I think so.

Commander Gerken (Chile). — I really want to ask for more information about this matter, because if the election of Directors is by points there cannot be a majority; there must be so many points for the first Director, so many for the second and third Directors. Therefore I agree with the proposal of the Bureau to delete "the provisions of Articles 58 (*a*) and (*b*) will apply", because you cannot apply them. You have an election in which you have so many points.

Captain Luymes (Netherlands). — How many?

Commander Gerken (Chile). — That depends on the number of votes. If we have five and all the votes are for one name as President, there will be 50 votes. There cannot be a majority in that.

Captain Luymes (Netherlands). — But I speak of a majority.

Commander Gerken (Chile). — There cannot be a majority, there must be a maximum for one, a second number for the second and a third for the third Director. My proposal was to accept the Bureau's suggestion, because there cannot be a majority when you give points to each Director. The result will be so many points for one, and so many for the others. There cannot be a majority in any way. I cannot understand which point will be a majority.

M. Fichot (France). — I consider that it is not difficult to determine a majority. If one represents the number of votes by x , y , etc... the total of votes will amount to $x+y+etc.$, and as a definite number of votes is required for election, there is no difficulty whatever in defining majority in any case.

The Chairman. — The Secretary-General has made a list now and I should like to listen to what he has to say about it.

The Secretary-General. — I think I can explain this to a certain extent. I have made out a list of the schedule of votes and points that could be applied. I am here taking figures which are entirely hypothetical. I will not say that they are correct, but allowing votes, so many for one country and so many for another, such as you have in your lists, plus certain numbers for Poland and Germany, for which I have assumed numbers, this list gives a total of 126 votes. That is that the first Director on the list would have 378 votes, namely three times 126, supposing that everybody voted for him. Now, obviously, if you divide that 378 by two, you get 189, and the absolute majority under these circumstances is 190 for the first Director. The highest possible number of votes for the second Director is 252, twice 126 of course. Now half of that is 126 and adding one to give the majority, we get 127, and so on for the third Director — it is not worth while going on with the explanation — that would safeguard the desires of Captain Luymes, and is the method by which we have already carried out two different elections which, I think, have been perfectly satisfactory to everybody.

Commander Brandon (Great Britain). — May I move that the only alteration required is that the word "principle" should be substituted for the word "provisions" at the end of the second line of par. (vii) on page 20 in the English text of the Statutes.

The Chairman declared the discussion closed and *the amendment proposed by Commander Brandon was adopted.*

PRECEDENCE OF DIRECTORS (cont.).

The Chairman. — We now come to Article 59 (viii). The Bureau proposes that Art. 59 (viii) should be deleted and inserted in Art. 22 (i).

Commander Brandon (Great Britain). — May I say as regards this proposal of the Bureau to delete Art. 59 (viii) and to insert the same sentence in Art. 22 (i) that I do not agree with it; I think the sentence in question belongs to the procedure describing the election, where it is now, and it should remain there.

M. Fichot (France). — I am sorry I do not agree with Commander Brandon. I consider the question of the powers of the Directing Committee as primordial. A leader is needed in the Committee itself, and therefore it should be specified, from the very outset, who is to be that leader, and what powers he shall have.

This specification should be made in precise terms, the substance of which should state that the President is alone qualified to make the Bureau officially responsible.

By this means, any possible trouble between the three Directors will be avoided; the President will have very definite rights over the other two Directors.

Captain Schweppe (Germany). — I think we have to decide if that is a new question or whether it is in combination with the proposal of the Bureau to put this one sentence in another place. If it is new I am of opinion that we must take it before the Plenary Session.

The Chairman. — As far as I understand now Commander Brandon was of opinion that Art. 59 (viii) should be where it is now. Is that so?

Commander Brandon (Great Britain). — Yes.

The Chairman. — The Bureau was of opinion that it should be changed and be put in Art. 22 as a part of this Article. I think we must vote on that now. I for my part quite agree with Commander Brandon that Art. 59 (*viii*) ought to be in its present place.

Captain Luymes (Netherlands). — I am in agreement with Commander Brandon that Art. 59 (*viii*) should stay where it is; but I would ask whether we cannot hear once more what is drawn up in Art. 22 (*i*) and Art. 26. I do not remember at the moment quite well what we have accepted.

M. Albert (I. H. B., Secretary to the Committee) said that the modification of Art. 22 (*i*) had been held over until after the examination of Art. 59. He recalled that it had been decided that if two Directors only be present in a meeting, and a decision cannot be postponed till a subsequent plenary meeting, the President, or his substitute, shall have the casting vote.

Captain Luymes (Netherlands). — I believe the only thing we have organised at present is who will be the President, but it has not yet been said who will be the Acting President.

I should propose to leave Art. 22 (*i*) as it is, and to add somewhere — it may be done in Art. 59 (*viii*) — something about the acting President.

M. Albert (I. H. B., Secretary to the Committee). — May I point out Art. 59 (*ix*) ?

M. Fichot (France). — On reading Article 22: "This Committee shall consist of three Members, to be called Directors, one of whom shall act as President", one immediately wonders who is the one referred to. In my opinion, the words "one of whom" are far too indefinite. To make it clearer, it should be stated that he who acts as President is he who has recorded the greatest number of votes at the election.

Professor Tenani (Italy) observed that the procedure for the election of the President is already laid down by the regulations of Art. 59.

Mahmoud Bey Bayram (Egypt). — I think that after Article 22 (*i*), a reference to "Paragraph of Art. 59" should be added.

The Chairman. — This difficulty might be solved by putting in Article 22 (*i*): ".....shall act as President (see Art. 59 (*viii*))."

M. Fichot (France). — I propose the following wording: "This Committee shall consist of three Members, to be called Directors, one of whom shall act as President. The method of their election and their respective seniority are settled by the regulations of Article 59".

M. Albert (I. H. S. Secretary to the Committee) then drafted M. Fichot's proposal in a definite form, and made the following announcement.

This proposal consists of adding to (*i*) of Article 22 the following sentence: "Their order of precedence and the mode of their election are regulated by Articles 59 and 60", and of deleting (*iii*) of the same Article 22.

In consequence, paragraph (*iv*) will be numbered (*iii*) and paragraph (*v*) will be numbered (*iv*).

Article 59 (*viii*) would remain unaltered.

The Chairman. — We will put this to the vote.

The proposal of M. Fichot was then read in English and adopted.

The Chairman. — We can proceed to Art. 60 (*i*). It is proposed that the addition suggested by the Bureau: "The provisions of Art. 58 (*a*) and (*b*) will apply" shall be rejected. Is there any objection to that?

The concluding words of Art. 60 (*i*) are: "A similar procedure to that laid down in that Article will be carried out". It is no longer necessary to refer particularly to the provisions of Art. 58 (*a*) and (*b*) as those provisions are already mentioned in Art. 59.

(Adopted).

M. Albert (I. H. B., Secretary to the Committee). — The deletion of paragraph (iv) of Art. 60, proposed by the Bureau, is connected with the modification proposed by the Bureau for Article 23. This modification not having been adopted by the Committee, it is no longer necessary to propose the deletion of paragraph (iv), nor the modification of paragraphs (iv), (v) and (vi).

Professor Tenani (Italy). — It has been proposed to establish a certain precedence in the position of the Directors and that this question should be referred to the Plenary Session. As this question is connected with the last paragraph of this article, I think that it can be discussed now.

Captain Fablet (Argentine). — I thought that M. Fichot's proposal including this suggestion had already been adopted.

M. Fichot (France). — The object of my proposal referred not only to the question of precedence, but was intended to define clearly the authority of the President of the Bureau, for instance that he should be alone qualified to make the Bureau responsible. It is essential that important documents should bear his signature, and his only.

INTERPRETATION OF TEXTS.

The Chairman. — *Art. 65.* — France proposes that the Article be changed to make both languages authoritative. The League of Nations Statutes are referred to, the wording of which is to the effect that if doubt arises the French and English texts will be authoritative.

M. Fichot. (France) — The sole aim of the French proposal is to put the Statutes of the International Hydrographic Bureau in accord with those of the League of Nations, according to which the English and French texts are equally binding.

M. Harada, with whom I discussed this question, was good enough to say that he was fully in agreement with my views, and he offered to attend the Committee when this question was to be discussed, in order to support the French proposal.

Commander Gerken (Chile). — I propose to cancel that part which follows: "These Statutes shall be drawn up in English and French". You can put the Statutes in English and French, and they are obliged to have the same meanings, because you cannot have different meanings in the two languages.

M. Fichot (France). — This rule is applied for all treaties or statutes drafted in both languages. It is quite inadmissible that a divergence should exist between the two texts; but the quotation proposed by France is usually inserted, as it also is in the Covenant of the League of Nations.

Commander Gerken (Chile). — I propose that the first part shall be left and the rest cancelled.

The Chairman. — I do not know whether any divergences have often been found, but if there are divergences, what are you going to do? We must adhere to one language if it should happen occasionally, but we do not think it will happen.

M. Fichot (France). — I consider that the Chairman's remark is very true, but make the objection that it might also apply to all the texts adopted by the League of Nations. I repeat that it is only because the International Hydrographic Bureau is an offshoot of the League of Nations, that I believe it to be necessary and logical to stipulate in the Statutes that the two texts shall be equally binding.

I am quite willing, however, to agree with the Chilean Delegate's proposal, which simply says that the Statutes shall be drafted both in English and in French.

Commander Brandon (Great Britain). — May I say, Mr Chairman, that I do not wish actively to oppose the suggestion of M. Fichot, because I do not think the question has any practical importance, but it seems to me that the arrangement in the League of Nations is not strictly logical. It is quite impossible, as anyone who has had experience of translation knows, always to render the exact meaning from one language to another. You get near, but not always the exact meaning; and I understand that these Statutes — due probably to the very regrettable death of M. Reynaud — were drawn up in English and afterwards translated into French. It seems to me therefore that should there be any divergence of opinion, which is very unlikely, the English text should stand.

Captain Fablet (Argentine). — I quite agree with the proposal of the Chilean Delegate, because the Bureau states here in the last paragraph that the Statutes of the Bureau have not the importance of a diplomatic treaty where every word has to be weighed with great care. We here are sailors and not diplomats and for this reason I agree with the Chilean Delegate's proposal to leave the first line and suppress the second part.

Commander Brandon (Great Britain). — Could M. Albert or the Interpreter tell us how many texts there are of the Covenant of the League of Nations. It is a different case, I know there are only two authoritative texts, but I suppose it has been translated into the languages of the other States Members.

The Interpreter in reply to Commander Brandon said that the Covenant of the League of Nations was actually translated into numerous languages, but that only the French and English texts were binding. It had occasionally occurred that the two texts had shown somewhat serious divergences, but in this case a compromise had always been sought and found.

Commander Brandon (Great Britain). — That was my point, that in the case of the Treaty of Versailles and the Covenant of the League of Nations there are many texts of which two are official. Here we have only two texts and it seems unnecessary to make them both official.

Commander Gerken (Chile). — I think there is a misunderstanding, because Art. 65 says :

" these Statutes shall be drawn up in English and French ; should any divergence be found in the meaning of the two texts the wording of the English text shall be taken as authoritative ".

I think that is a different proposal to that of the Hon. Delegate of Great Britain. What I propose to cancel is the second part.

Commander Brandon (Great Britain). — Evidently I did not make myself clear. The point to which Commander Gerken draws attention is the one which I was trying to make. In the case of the League of Nations there are many texts and two are chosen as authoritative. Here we have only two texts under consideration, and the two cases are not in the same category, and therefore here we need not be bound by the rules of the League of Nations.

M. Fichot (France). — The difficulty remains the same in case of divergences between the only two existing texts.

I note that the interpreter of the League of Nations has confirmed that which I said just now, that at the League of Nations both texts are equally binding, and I ask therefore : Can the International Hydrographic Bureau, which is after all an offshoot of the League of Nations, act differently ?

From a practical point of view, I do not think difficulties will ever arise ; I see that, for the last week, reports written in both languages have been examined, and that a divergence has never been found which could not be immediately reconciled.

The Chairman. — Anything further ?

Captain Fablet (Argentine). — I think this question of languages is a question of prestige. I think that amongst sailors we shall not have any big differences regarding the sense of the two texts, but we propose that in case of divergence the question should be decided by the Committee of the Bureau. Something to that effect.

Commander Brandon (Great Britain). — I support that.

Commander Rasikotsicas (Greece). — I do too.

Egypt, Spain, Brazil, Italy, the Netherlands, Sweden and Norway also supported the proposal.

The Chairman. — The words should be to the effect that in case of divergence it is left to the Bureau.

M. Albert (I. H. B., Secretary to the Committee) said that the wording of Article 65 should therefore be as follows:

"These Statutes shall be drawn up in English and French; should any divergence be found in the meaning of the two texts, the Directing Committee will decide on the precise interpretation".

This was adopted.

LANGUAGES USED AT CONFERENCES.

Captain Luymes (Netherlands). — I would ask the Committee if it is not worth considering now to insert in Part IX "International Hydrographic Conferences" a similar Article as in Part. IV, Art. 21 (a). In Part. IV, it says:

"the languages used by the Bureau are those which have been adopted by the League of Nations, namely French and English"; but it says nothing about the languages used at international Conferences. I would propose to insert in Part IX an article similar to Art. 21 (a). I would suggest that the official languages should be English and French.

Captain Schweppe (Germany). — On page 9, Chapter IV, Art. 21 (a), might this not read:

"The languages used by the Bureau and spoken at Conferences..."?

Commander Brandon (Great Britain). — I think it follows, but still...

Captain Luymes (Netherlands). — The heading would then have to be changed. That is why I think it would be better to insert a new Article. We have a spare one — No. 48. But the principal thing is will it be put in or not.

Captain Schweppe (Germany). — I propose that the present Article 49 should become 48, that Article 50 becomes Article 49, that article 51 should become 50, and that there should be a new Article 51, to read as follows:

"The languages used at the Conferences shall be English and French".

This was adopted.

The meeting adjourned at 1815.

CHAPTER V.

The fifth meeting of the Committee was held at 1530, on Wednesday, 3rd November 1926.

MISCELLANEOUS AMENDMENTS TO TEXTS OF THE STATUTES.

The Chairman. — We have now finished the work concerning administration. There are some supplementary proposals for additions. The Bureau proposes the following amendments to Art. 35 (a) : Change Greece " 855.000 " to " 918.000 ".

Commander Gerken (Chile). — The Hon. Representative of Greece is not on the sub-Committee. I wish to know if he accepts this amendment.

Commander Rasikotsicas (Greece). — The proposal is made by the Greek Government.

The Chairman. — *Article 50*, insert : first line, between " Members " and " and " : " a Representative of the League of Nations ". This has already been adopted.

PROCEDURE TO BE FOLLOWED FOR BRINGING SUBJECTS BEFORE CONFERENCES.

Article 56 (b) insert : last line, between " subject " and " not " : " in writing ".

M. Albert (I. H. B., Secretary to the Committee). — May I point out that the French text is not in conformity with the English. There is a modification which is in both English and French ; in the last line between " subject " and " not " put " in writing ". The other modification which is to put " States Members " after " Delegation " does not exist in English. If you follow both texts of the Statutes, you will notice that the English text says " unless it is proposed by at least three of the Delegations of the States Members ", while the French text says " que s'il est proposé par au moins trois Délégations ". Therefore the Bureau proposes to bring both texts into harmony by putting " trois Délégations des Etats Membres ".

(Adopted).

Commander Brandon (Great Britain). — Have we adopted the alteration " in writing ".

The Chairman. — Not yet. The paragraph is as follows :

" The President of the Conference must be notified in writing not less than twenty four hours beforehand of the intention to introduce such subject ".

(Adopted).

ANNOUNCEMENT FROM THE CHAIR.

The Chairman. — I want to make an announcement. The Conference will meet for a Plenary Session at 2.30 p.m. on Thursday, November 4th (Tomorrow).

Business :

- (a) *Proposals Vb.* Miscellaneous. Buoyage and Signals.
- (b) Charges for Radio Compass Bearings.
- (c) Invitation from the Spanish Government.
- (d) Other business.

We now pass on to:—

Article 57 (a).

It is proposed to change the word "Member" in the first line to "Delegation of a State".

(Adopted).

Article 57 (b).

It is proposed to change the word "State" in the first line to "Delegation of a State".

M. Albert (I. H. B., Secretary to the Committee). — It seems to me that the words following do not agree with the modification proposed — "A State which is not a Member, and is represented at a Conference". It is not the Delegation which is represented, it is the State, therefore, if we put "the Delegation of a State", we must change the rest.

(It was agreed not to change the text).

The Chairman. — We have now to deal with Article 58 (c): The proposal is to change the last line to: "case of the election referred to in Article 59 (ix)".

(Adopted).

APPLICATION OF THE DECISIONS MADE AT THE CONFERENCES (cont.).

Commander Brandon (Great Britain). — There are a few questions deferred.

M. Albert (Secretary to the Committee). — Yes, that is so.

The Chairman. — We have now to deal with the Proposal on page 118, Article 6 (iii); Change "cause" into "urge".

Commander Brandon (Great Britain). — I agree with Captain Gerken in that, at the time we discussed the question, I thought the proposal had been rejected, but the next day it was stated by the Chairman, I think, that it had been deferred.

M. Albert (I. H. B., Secretary to the Committee). — It was adjourned at the end of the second meeting.

Commander Brandon (Great Britain). — It was my impression that we were agreed at the time that "cause" was a very excellent word, and I think we might leave it. If there is an alteration to be made in the French text we might adopt it.

M. Fichot (France). — I am not the originator of the proposal, but I was requested to suggest a more energetic word and therefore I propose "to hasten" or to "urge" instead of "to cause".

Commander Rasikotsicas (Greece). — I was of opinion that this proposal had been rejected, but that afterwards the following draft resolution was presented:

"The Committee, after having discussed the proposal of the Netherlands, expresses the desire that the Bureau should study the publications and charts of the States Members, and shall correspond with those States Members which have not carried out the resolutions of the Conferences in order to know their reasons and classify the replies so that they may be discussed at a future Conference".

Captain Schweppe (Germany). — As I do not see in the Proceedings any definite statement of the rejection of the proposal that we should change "cause" to "urge", I would propose that we now reject, it, and adopt the resolution another time.

Commander Brandon (Great Britain). — I think that resolution was quite definitely adopted, and I do not think we need return to it.

(Adopted).

The Chairman. — We must come to a decision whether it shall be changed or not.

Captain Schweppe (Germany). — We have rejected the amendment now.
(*It was agreed that the Statute should not be changed*).

LEAVE OF DIRECTORS AND SECRETARY GENERAL (cont.).

M. Albert (I. H. B., Secretary to the Committee). — It had been decided to reserve for a second reading the proposed amendments concerning Articles 22 (vi), 22 (vii) and 29 (e) and (f). These paragraphs refer to sick leave and to home leave to be given every three years to the Directors and the Secretary General. It was decided that these provisions should be examined jointly so as to arrive at a solution which would be the same in the case of the Directors and the Secretary General.

INTERPRETATION OF TEXTS.

Commander Gerken (Chile). — I wish to propose a further examination of Art. 65 because the Hon. Delegate of Egypt made a very interesting observation about this article.

M. Albert (I. H. B., Secretary to the Committee). — May I remind the Committee that it had been decided previously that a second reading should be expressly reserved for such articles as have been left in abeyance after discussion.

The Chairman. — Are you content ?

Commander Gerken (Chile). — No, I am not.

The Chairman. — Is the Committee in favour of going back to Art. 65

Captain Schweppe (Germany). — I agree.

Captain Luymes (Netherlands). — So do I.

Captain Schweppe (Germany). — I propose that we should vote on the question of going back to Art. 65.

M. Albert (I. H. B., Secretary to the Committee). — Those in favour of discussing Art. 65 again please hold up hands.

Five in favour, six against.

The motion is lost.

Commander Rasikotsicas (Greece). — Great Britain abstained from voting.

Commander Brandon (Great Britain). — Is it necessary, Mr. Chairman, to vote on every subject ? I did not wish to vote against the proposal because I had discussed it with Commander Gerken and what he proposed seemed to me to be sound, but I did not wish to advocate it, as it did not seem worth while spending further time on it.

Commander Gerken (Chile). — It is not a new discussion. It is only a small amendment in order to make the Article as clear as possible.

The Chairman. — Captain Gerken, have you anything to propose ?

Commander Gerken (Chile). — No, it was the Egyptian Delegate who suggested the amendment.

Commander Brandon (Great Britain). — The Egyptian Delegate voted against discussing the subject again.

Mahmoud Bey Bayram (Egypt). — That is true. I did not wish to advocate re-discussion and it was only a small amendment I proposed.

The Chairman. — Are you in favour of closing the discussion of this question ?

Mahmoud Bey Bayram (Egypt). — It is closed.

SICK LEAVE OF DIRECTORS AND SECRETARY GENERAL (cont.).

Captain Schweppe (Germany). — Did not Captain Luymes make a proposal regarding Art. 29 with reference to the Secretary General's leave ?

Captain Luymes (Netherlands). — Yes, but we have also to go back to Article 22 now.

Captain Schweppe (Germany). — I propose that Captain Luymes should propose the wording for Articles 22 and 29.

Captain Luymes (Netherlands). — Yes, if the Chairman agrees.

The Chairman. — We await the proposals to be made by the Hon. Delegate of the Netherlands.

Captain Luymes (Netherlands). — For Article 22 (*vi*) I propose :

“ A Director having been incapacitated from duty for more than twelve months, even if not consecutive, during his mandate, shall automatically cease to be a Member of the Directing Committee ”.

The Chairman. — Are you in favour of that ?

Captain de Sampaio (Brazil). — I propose the following for Art. 22.

“ A Director who has been unable to fulfil his functions during six consecutive months, or during twelve months non-consecutively, ceases automatically to be a Member of the Directing Committee ”.

And the same provision to be inserted in Art. 29.

Captain Schweppe (Germany). — May I hear the proposal of the Netherlands once more ?

Captain Luymes (Netherlands) read his proposal again.

M. Fichot (France). — The Dutch proposal is wider.

Commander Gerken (Chile). — I support the proposal of the Brazilian Delegate. It is nearer to my own.

The Chairman. — Are you all in agreement with the proposal of the Brazilian Delegate ?

Eight in favour.

Commander Gerken (Chile). — Brazil did not vote.

Captain de Sampaio (Brazil). — I am quite prepared to vote.

The votes were counted again. Nine in favour.

The Brazilian proposal was adopted.

Commander Brandon (Great Britain). — It must be understood that this proposal refers to the period of five years.

Captain Schweppe (Germany). — That should be added.

Commander Brandon (Great Britain). — Is it understood that this Resolution refers to the duration of the mandate and that this will be explicitly stated in the text ?

M. Albert (I. H. B., Secretary to the Committee). — May I read the text ? It is as follows :

“ A Director having been incapacitated from duty for six consecutive months or for a total period of twelve months if non-consecutive during his mandate shall automatically cease to be a Member of the Directing Committee ”.

Captain Luymes (Netherlands). — I suggest “ having been incapacitated during his mandate ”.

M. Albert (I. H. B., Secretary to the Committee). — What we mean is that this period applies to the mandate. I think it would be better to put it at the end.

Captain Luymes (Netherlands). — If Captain Brandon agrees.

M. Albert (I. H. B., Secretary to the Committee). — The English text would be :

“ A Director having been incapacitated for duty for six consecutive months or for a total period of twelve months if non-consecutive during his mandate shall automatically cease to be a Member of the Directing Committee ”.

The French text would be :

“ Un Directeur qui s'est trouvé dans l'impossibilité de remplir ses fonctions pendant six mois consécutifs ou pendant une durée totale de douze mois non-

consécutifs durant son mandat cesse automatiquement d'être Membre du Comité de Direction”.

M. Fichot (France). — I propose :

“ A Director who, during his mandate, finds it impossible to carry out his duties for six consecutive months or for a total period of twelve months, not consecutive, automatically ceases to be a Member of the Directing Committee.

Captain Luymes (Netherlands). — I propose the same provision for the Secretary General.

Captain de Sampaio (Brazil). — I have already proposed that.

The Chairman. — It is the same wording for the Secretary-General.

TRIENNIAL LEAVE OF DIRECTORS (cont.).

Article 22 (vii) says :

“ In every three years of service each Director is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him.

Captain Luymes (Netherlands). — I do not see the necessity of the restriction “ for the purpose of visiting his own country ”, nor the necessity to grant travelling expenses. The salary is ample. “ Reasonable travelling expenses ” is too elastic, and in comparison with what the League of Nations does it is out of place here, all the more so as the general impression is that the regulation of the League is too generous. Lastly, I should prefer to substitute five for three years, that being the ordinary duration of a Director's mandate. I propose for Art. VII that for every five years of service each Director be entitled to six months' leave.

The Chairman. — Six months ?

Captain Luymes (Netherlands). — More or less, according to the opinion of the Committee.

M. Albert (I. H. B., Secretary to the Committee). — Must the six months be taken consecutively or can they be split up ?

Captain Luymes (Netherlands). — A total of six months' leave.

Captain Fablet (Argentine). — Must the Director have completed five years' service before he has his leave ? In order that this should not be the case I propose that he could have his holiday during the five years.

M. Fichot (France). — A Director who is appointed between Conference and whose mandate would therefore not last five years would have to have a special provision for his leave.

Captain Luymes (Netherlands). — It can be in proportion to the length of service.

Captain Schweppe (Germany). — Six months for five years is just 10 per cent, that is therefore the rate to be applied.

Captain Luymes (Netherlands). — Or a proportionate term for a shorter period.

M. Albert (I. H. B., Secretary to the Committee). — It would be sufficient to say that the leave is one month out of ten.

Captain Luymes (Netherlands). — Yes, but that might mean that he could only be away one month.

M. Albert (I. H. B., Secretary to the Committee). — If you say the rate it means the percentage.

Captain Luymes (Netherlands). — What about the English ?

Commander Brandon (Great Britain). — “ The scale of the leave of the Directors shall be. ”

The Chairman. — It depends upon the travelling time. One month a year and travelling time.

M. Fichot (France). — If it is a Japanese Director you could not treat him in the same way.

Captain Fablet (Argentine). — I would like to add to this Article that the travelling expenses for the Directors should be paid. It is not fair that a Director who lives far away should have the same conditions as an Italian or a French Director. It would be fairer to pay travelling expenses.

Captain de Sampaio (Brazil). — I support the proposal of the Hon. Delegate of the Argentine.

Captain Gerken (Chile). — I support it too.

Greece, France, Italy and Spain also supported the proposal.

The Chairman. — If a Director from Japan visits his home then it takes five weeks from Monaco to Tokio, and it takes five weeks back, that makes ten weeks and all his leave is spent in travelling. There must be other leave for Directors coming from Japan and similar far-off places.

Captain Fablet (Argentine). — You can add to the duration of leave the time needed to go to his country and to return.

M. Fichot (France). — It is in the text of the Bureau's proposal.

Captain Schweppe (Germany). — If a Japanese Director takes his leave six times and each time has a period allowed for travelling it might amount to a too extended leave.

M. Albert (I. H. B., Secretary to the Committee). — That is why the Bureau said three years'.

The Chairman. — I do not think we can make any absolute exception for those Directors who have been appointed from countries that are very far off. It would be Japan and China, Chile, America and the Argentine. I think it is difficult to make exceptions. We must adhere to this term "exclusive of travelling time".

Captain Luymes (Netherlands). — My opinion was that it was possible to stay away from your country for five years, but if the Committee is of opinion that it must be "exclusive of travelling time", then I withdraw my proposal, because then I think the original proposal of the Bureau is better: "in every three years of service each Director is entitled to two months' leave, exclusive of travel time".

The Chairman. — I agree.

Commander Gerken (Chile). — I wish to ask for an explanation. I do not quite understand what is meant by "in every three years". A Director in the normal course of things is appointed for five years, and if he has leave once every three years that means once.

M. Fichot (France). — Either he is re-elected or he is not re-elected. If not then he can do as he likes at the end of two years. If re-elected then one year after re-election he will take the leave provided.

Commander Gerken (Chile). — I think it is fairer to consider the five years of the mandate and not to speak of every three years.

Captain Fablet (Argentine). — The duration of leave should be arranged according to mandate.

M. Fichot (France). — That would be unfair for a Director re-elected for one year.

Commander Brandon (Great Britain). — In order to take this into consideration the fairest way would be to fix a rate of leave.

The Chairman. — I think that would be best.

M. Fichot (France). — I think the text proposed by the Bureau is the simplest and the most fair. I agree to that.

The Chairman. — I agree entirely.

Captain de Sampaio (Brazil). — Let us vote on it.

The Chairman. — One or two Members are absent, however, we will vote on the Bureau's proposal. Those in favour?

Eight in favour. The Bureau's text is adopted.

TRIENNIAL LEAVE OF THE SECRETARY GENERAL (cont.).

M. Albert (I. H. B., Secretary to the Committee). — Then I think we take the same text for the Secretary General, do we not?

The Chairman. — Yes. Art. 29 (f).

Commander Brandon (Great Britain). — The Secretary General's leave as proposed by the Bureau is on a slightly lower scale. Shall we leave that?

M. Fichot (France). — As we have already established the same conditions with regard to sick leave, it would be only fair that we should also establish the same conditions with regard to leave.

The Chairman. — Are you agreed? Two months instead of six weeks?

Adopted unanimously.

M. Albert (I. H. B., Secretary to the Committee). — Now that the business of the full Committee is terminated, the Chairman proposes that the Subcommittee that has been appointed for dealing with Articles 34 and 35, and the consequences which application of these Articles would have on the coming elections, should now sit.

This Committee is composed of Captain Fablet, Commander Brandon and Captain Luymes.

The sitting terminated at 1700.

CHAPTER VI

The sixth meeting of the Committee was held at 0930, on Friday, 5th November 1926.

The Chairman. — Gentlemen, the Meeting is open. I would ask Captain Schweppe to give the Report on the work of the sub-Committee with respect to various articles here.

REPORT OF THE SUB-COMMITTEE.

Captain Schweppe (Germany). — The first question was that of Art. 34 (Page 130 of the "Proposals"). The sub-Committee had been charged with the duty of dealing with the Statement made by the two Directors of the Bureau and it has come to the following decision. We are here faced with three different questions :

1. Reduction of contributions.
2. Reduction of Salaries of the Directors.
3. Change in organisation of the Bureau, that is to say, replacing of the Secretary General by a Secretary.

I. — According to the news received from the Financial Committee, the sub-Committee propose not to reduce the contributions but to recommend to the Plenary Session the following proposal, which will be distributed by the Secretary. The proposal is the following :

"After careful consideration and consultation with the Finance Committee the Statutes Committee are inclined to the view that it should be possible to effect a reduction in the scale of contributions of the States Members without impairing the efficiency of the Bureau. As however, the existing uncertainty as to the future movements of the French franc renders it impossible to form a reliable estimate of the relation between receipts and expenditure during the next five years, the Committee do not wish to alter the Statutes at the present time. But they consider that the new Directing Committee should thoroughly explore the financial situation of the Bureau, obtaining if necessary expert assistance from one or more of the States Members, and at the end of a year should render a full report on the matter to all the States Members, indicating, in particular, what economies have been or can be effected".

II. — As to the second question, the sub-Committee does not consent to reduce the salaries of the Directors. The Netherlands Delegate here was of a different opinion. This Resolution was accepted after careful study. The Netherlands Delegate observed that, for instance, the French officials receive salaries which are at the rate of one fifteenth of those of our Directors. However the other Members and — I think it was the Chilean Delegate — said that the French officials had other facilities which made it possible for them to effect savings in a number of cases. Free education for the children, free travelling, etc.

M. Fichot (France). — I doubt whether many of them can save in spite of that, but that is no reason for treating our Directors in the same way.

Captain Schweppe (Germany). — Further, the present state of things in France cannot be said to be normal. We have at the same time asked Dr. Velleman for some information regarding salaries of the officials of the

League of Nations. He tells us that the salaries at the League are higher than those of our Directors, and the reason is that it is necessary to give some compensation to officials who leave their country and have to interrupt the education of their children. He added that the question of salaries had often been discussed at the League of Nations, and it was decided that it was fair to maintain the scale of payment.

III.— The third question referred to the replacing of the Secretary General by a Secretary. This, you will remember, is the proposal made by Admiral Phaff. The sub-Committee does not recommend the adoption of the proposal of Admiral Phaff. But after having studied the Directors' Statements, the Sub-Committee is of opinion that the organisation of the Bureau is not at all satisfactory. For this reason it is proposed to submit a Resolution to the effect that the Directing Committee shall be charged with the task of setting up, as soon as possible, an internal organisation and procedure which will guarantee that the heavy credits paid shall be used as effectively as possible so as to carry out the tasks laid down in the Statutes. The new procedure should be communicated to the States Members as soon as it has been introduced.

The speaker then made a proposal on the following lines :

" The Directors on the point of being elected ought to consider it as their preponderant task to change, as soon as possible, the organisation and the procedure of work of the Bureau, so that the Bureau should be able to use the very considerable credits put at its disposal by the Conference for accomplishing the task in accordance with the Statutes ".

Captain Schweppe (Germany). — The Chairman has asked me to put to the vote the first of the proposals, that is to say, the diminution of the contributions of the States Members of the International Hydrographic Bureau. This proposal has been rejected, by the Sub-committee but it is now put to the vote of the Committee.

A vote was taken by a show of hands.

The Sub-Committee's rejection was upheld.

The proposal was adopted.

Professor Tenani (Italy). — My objection is that as the introductory remarks say that it would be possible, according to the information received from the Finance Committee, to diminish the contributions without impairing the work of the Bureau, I do not see why, at a time when every State is trying to diminish its expenditure as much as possible, the proposal should not be accepted. However, I want it to be understood that I did not vote against the proposal, but I merely abstained from taking part in the vote.

REDUCTION OF THE SALARIES OF THE DIRECTORS.

Captain Schweppe (Germany). — Those who are against the diminution of the salaries of the Directors ?

Commander Brandon (Great Britain). — The Netherlands Delegate wished me to place on record that he disagreed with the majority recommendation of the sub-Committee and was of opinion that these salaries could and should be reduced.

(A vote was taken by a show of hands, and the proposal to reduce the Directors' salaries was rejected).

REGULATIONS FOR THE INTERNAL ORGANIZATION OF THE BUREAU.

Captain Schweppe (Germany). — The Chairman would like you to vote on the following resolution :

The sub-Committee is not in favour of replacing the Secretary General by a mere Secretary, but after studying carefully the Memorandum of Admiral

Phaff, the sub-Committee came to the conclusion that the organisation of the International Hydrographic Bureau is defective from many points of view, and that the Directors on the point of being elected ought to consider it as their preponderant task to change as soon as possible the organisation and the procedure of work of the Bureau so that the Bureau should be able to use the very considerable credits put at its disposal by the Conference for accomplishing the task in accordance with the Statutes.

Captain Fablet (Argentine). — I want to know if the Bureau has rules of procedure.

M. Albert (I. H. B., Secretary to the Committee). — Rules of procedure were fixed before I was a member of the Bureau; they were published in the first Annual Report.

Captain Fablet (Argentine). — Do I understand your proposal to mean that the Directing Committee will consider putting that regulation in a new form its preponderant task?

Captain Schweppe (Germany). — As we have just been told, there was certainly an order of procedure for the inside work of the Bureau, which has been published. In the course of time, and through circumstances which occurred, it was found that that order of procedure was insufficient or ought to be changed, and as proof of this desirability, I cite the two, partly contradictory, memoirs which are found at the end of the Proposals Made. I find that this is something abnormal, and therefore in the inside organisation of the Bureau some change ought to be made. It is not possible that such a state of disharmony should exist in the Bureau itself; the work of the Bureau must suffer under such conditions.

Commander Brandon (Great Britain).— May I say a few words on this subject. The view of the sub-Committee, as I understand it, was that we have here two Directors who have totally different conceptions of the principles of organisation which should be followed in the Bureau and the scope of the Bureau's work. We consider that those important questions should now be so decided by the new Directing Committee and approved by the States Members that, for the future, such different conceptions between any of the Directors cannot be possible. The Netherlands Delegate disagreed with the recommendation of the sub-Committee as regards the Secretary General, but with this reservation wished to associate himself with the proposed resolution.

The Chairman. — On this occasion it is necessary for me to make a few remarks on Admiral Phaff's statement.

On reading page 144, I am under the impression that there has possibly been some lack of conformity in the conception of the divisions of the work of the Bureau. It is not in any way my intention to say that the work of the Bureau has not been well and satisfactorily done; on the contrary. But it seems to me that the limits of activities for the Directors and the Secretary General have not been sufficiently defined. It is necessary to have full clarity in this delicate matter. There must not be any vagueness as to the qualifications required by the Directors and by the Secretary General. I do not think I am mistaken in my conception that the Secretary General should be the head of the administrative section of the Bureau, although of course, under the general direction of the Directing Committee, that is understood; but I mean that he must have the responsible vote in administrative matters. In any case, surely this was the States Members' conception at the time the Bureau was established. I know personally that this was Admiral Parry's conception, and, as far as I know, it was also the idea of M. Renaud, whom I had the honour to know. For my part, I have always thought that the position of Secretary General should carry with it the exercise of initiative as well as of responsibility. There should not be any divergence of opinion on

this delicate matter. I think that the position of Secretary General in the above statement is proposed to be reduced to that of an ordinary subordinate Clerk; surely no one would approve such a suggestion. It is absolutely necessary for discipline, as well as for the reputation of the Bureau, that a clear decision on this matter be obtained as soon as possible.

As to the present holder of this position of Secretary General, it is not necessary to speak of him because every one knows that he has kept the whole Bureau together, and with his high qualifications he has been the connecting link between the Hydrographers of the world and the International Hydrographic Bureau. In this most conscientious and clever sailor we have had the best guarantee that work was going on well. We are deeply indebted to him, and he deserves our highest esteem.

Further I wish to suggest that submitting names for membership and admitting by ballot should be limited to the periodic Conferences. I think it practical that membership should be compulsorily binding for five years. Withdrawal from membership must be announced six months before the Conference, otherwise membership is binding for the next period.

It seems to me that only in this way is it possible for us to submit a stable estimate, an estimate that will keep, proposed by the Directing Committee and sanctioned by the Conference.

With regard to salaries, I have prepared some remarks, but I do not think I will discuss them at this point.

With regard to the Netherlands proposal to reduce the contributions of the States Members by 10 %, I should like to support this if it is possible, but I doubt whether it is.

With regard to the Secretary-General, I do not think it is absolutely necessary to have a person who is technically on the same level as the Directors, but I think it most desirable if it will contribute to the homogeneity of the Bureau. I know that several Representatives of the States Members held the view that the salary proposed for the Secretary in the organisation of the Bureau was proposed in the supposition that this post would carry with it a certain degree of responsibility as well as initiative, and that a man of organising ability was required. It seems to me that the position of Secretary General is something of a preparatory school for the Directorship. He must be entirely familiar with hydrographic surveying and hydrographic matters. He (the Secretary-General) knows all about the details of the office, and, as the necessary link between the Directors and the subordinate staff, he has acquired a very close knowledge of office as well as technical work. He is the integral element of the whole Bureau, and I would not have the slightest hesitation in giving the present holder of this position my vote if he had submitted his name as a candidate for a Directorship. In any case there is no doubt that the absolute condition under which he has submitted his name for the position of Secretary-General is that he is not going to be reduced to a subordinate clerk. I am quite sure of that.

The vice-Chairman, Captain Schweppe, then took the Chair.

The Vice-Chairman. — I have been asked by the Chairman to take the Chair for the questions which are now going to be dealt with. The Memorandum that has just been read by Captain Bjørset deals with some of the questions that have been already finally settled by our Committee. All that may be said about questions 1 and 2 can only be considered as being retrospective, because a vote has already been taken on these questions. But the third point can still be considered as open for discussion, and I shall come back presently to that point. In the Memorandum there was also a new proposal relative to the duration of Membership and the conditions of entrance of a new State. If we were to consider this proposal, it would mean a change in the Statutes. As the proposal is entirely new, we have to follow the pro-

cedure which is ordinarily laid down for such new proposals, that is to say, the proposal would have to be seconded by two Members and this proposal would then have to be communicated to the President of the Conference.

In the Memorandum presented by the Chairman (Captain Björset) there were certain observations referring to the new organisation and procedure which is to be applied to the internal work of the Bureau. These observations might certainly be very useful to the Directing Committee about to be elected and I propose that that part of the Memorandum should be handed over to the new Directors with a recommendation to make the best possible use of it.

With regard to the third proposal I think it can be voted upon. Will those in favour kindly raise their hands?

The proposal was adopted unanimously.

REVISION OF LISTS OF TONNAGES, SHARES, VOTES AND CONTRIBUTIONS — COMING INTO FORCE OF CHANGES IN STATUTES.

Captain Björset (Norway). — The sub-Committee has put forward the proposals with regard to the changes in Articles 34 (b) and 35 (a).

Article 34.

Article 34 (b) is to be modified as follows :

" The tonnages taken for the purpose of determining the contributions of the States Members are given in Appendix *D*, which is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Articles 61 (b) and 64) ".

Article 35.

Article 35 is to be replaced by the following :

" 35. (a) The scale given in Article 34 (a) (iii) determines also the number of votes allocated to each member in the elections for the Directors and Secretary General (see Articles 59 and 60). The number of votes is the same as the number of shares. The table which shows the shares, votes and contributions of the States Members is contained in Appendix *E* and is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Articles 61 (b) and 64).

" (b) The Principality of Monaco is treated on a special basis. To it are allotted two votes and its annual contribution is fixed at 6,000 French francs-paper ".

Article 36.

The following alteration is proposed in Article 36 :

In line 3 of this article, for " the tonnages and consequently the Table of contributions and votes " read " Appendices *D* and *E* ".

Article 37.

It is proposed to cancel the present Article 37 and to substitute :

" To become effective in the election for the Directors and Secretary General, alterations which Members consider should be made in Appendices *D* and *E* must reach the Directing Committee at least ten days before the opening date of a Conference. Such alterations will be submitted to the Conference for approval at the first Plenary Session.

" In the case of a bye-election, any alterations proposed must reach the Bureau not later than the latest date fixed for the receipt of the lists of candidates ". If any one has any suggestions to make on the suggestions of the sub-Committee perhaps they would do so.

Commander Brandon (Great Britain). — May I say, Mr. Chairman, that the proposed new wording for these articles, which also affects two other articles, was unanimously agreed upon by the sub-Committee and has been circulated to all Members of the Committee in French and English. The sub-Committee would have liked at the same time to circulate the proposed new tables which it is suggested should become Appendices *D* and *E*, but the Secretary-General was unable to supply these tables yesterday morning when they were asked for. I have here a table which was handed to me yesterday evening which gives the new scale of shares, votes and contributions. I have not yet been able to obtain the new table of tonnages. It is for the Committee to decide whether, in addition to considering the proposed changes of the introductory wording in the Articles, we should also consider these tables in their new form. In the discussion on the previous text which we had before us, it was decided by a big majority of the Committee that these tables formed an integral part of the Statutes, and the British Delegation is therefore of opinion that the tables should also be approved or amended as considered necessary by this Committee before they go to the Conference.

The Vice-Chairman. — As far as I understand it the question is that the tables in the Statutes are incorrect and this table is corrected up to date. I think that States Members should always inform the Bureau of alterations in their tonnage. I believe almost everybody has done so, therefore I think it is not necessary to discuss it, as the Bureau must be competent to correct it according to the information which they have got from the States Members. In that case I think we can simply adopt the new tables, but they must be laid before the Conference in Plenary Session.

Commander Brandon (Great Britain). — I should like to make the definite proposal that the Committee should consider the new tables prepared by the Bureau in conjunction with the changes in the Articles proposed by the sub-Committee.

The Vice-Chairman. — Commander Brandon suggests that we should deal with both points together, but I understand that we cannot adopt the new table without having conformed with the proposals given in Articles 34 (*b*) and 35 (*a*).

Captain Fablet (Argentine). — I am in full agreement with the proposal of Captain Brandon and recommended by the Chair, but I should like to remind the Committee that the Vice-President of the Conference informed the Conference that for the coming elections the change in the Statutes and the change of tonnage could not be taken into consideration, and that the elections would be based on the old Statutes. I think we might obtain a withdrawal of that communication of the Vice-President. I am in favour of linking up the present text with the new tables and the new figures, but I want you to realise that it would be conflicting with the communication of the Vice-President.

I propose that the Statutes should be either applied in their totality or not at all; it is impossible to apply part of the new Statutes and part of the old Statutes.

Commander Rasikotsicas (Greece). — I think that even in execution of the old Statutes, we can proceed to the election of the Directors on the basis of the new figures and in proof of this I refer you to Article 37 of the Statutes, where we read :

“ In order that the tonnage owned by each Member may be revised at the periodic Conferences it will, when proposing subjects to be discussed, supply the revised tonnage figures so as to enable the Directing Committee to adjust the table of votes and contributions ”.

This point will be submitted to the Conference in due course for approval. I think it is quite in agreement with the spirit of the old Statutes if, for the new elections, we base ourselves on the new figures.

The Vice-Chairman. — I propose to refer to the words of Captain Fablet just now, because I am of opinion that the remarks of the Vice-President regarding the Statutes were not correct. I was surprised by those remarks, and I think it might be well to go back to that question and propose a modification of the Statutes in the sense that the deliberations of the Committee about the Statutes must be applied at the end of the Conference. According to the old Statutes we must have three Directors, and as an example let us suppose that we have just decided to have only two. That is why the Statutes provide for the election of Directors at the end of the Conference, because it is considered that the Conference should profit by all deliberations on the various subjects. I think it is best now to end the discussion and vote on the proposals.

M. Fichot (France). — I am not sure that the theory just developed by Captain Schweppe would apply in all cases. In regard to the election of the Directors we would be basing ourselves on the new figures only, applying Article 37 of the Statutes. Now with regard to the communication that was made by the Vice-President of the Conference to the effect that we could not at present legislate for the coming elections I think that assertion is probably right, in particular with regard to the proposal that has been made by the Swedish Delegate to fix a limit of age for candidates. That proposal came too late to be taken into consideration and cannot have a retroactive effect on the candidates already presented. The eligibility of candidates cannot now be affected by that proposal even if it is accepted by the Conference. Therefore I am not quite in agreement with Captain Schweppe with regard to the election of the Directors being based on the new figures, but I agree with him for other reasons than those which Captain Schweppe has himself given.

Captain Fablet (Argentine). — I propose that we should now vote on the proposals of the sub-Committee with regard to the election of Directors. That election is not merely based on the votes and tonnages attributed to each State but also on other Articles which were partly modified by this Conference. I would remind you of the modification that was introduced into Article 22, par. ii. I think that in modifying the Statutes all modifications, and not merely some of them, should be taken into account.

The Vice-Chairman. — This is the first time I have seen this table and I notice that it has been prepared very hurriedly. I do not mean to criticise it. On the contrary. It was drawn up hurriedly in order that we might have an adequate and accurate table upon which the elections could be based, and it must be regarded merely as something of a temporary nature. But this matter can be arranged afterwards and I think the time has come when we must end the discussion and vote on the proposals which the sub-Committee has put forward.

Professor Tenani (Italy). — It seems to me that we contradict ourselves and proceed in an illogical way if we adopt the procedure proposed by Captain Brandon, because the text itself which we are to vote upon proposes that the figures should in future be incorporated as Appendices; that is to say outside the Statutes, and yet we are to combine the vote in order to make them a part of the Statutes, so that they are at the same time to be inside and outside the Statutes.

Commander Brandon (British Empire). — May I say with reference to the observations that the honourable Delegate for Italy has made that I do not regard the Appendices as outside the Statutes, and I think I am correct in saying that this is the view of the sub-Committee. Captain Fablet will no doubt correct or confirm that statement. It is specially provided in the Ar-

ticles which are now submitted to you for consideration that all alterations in these tables shall be submitted to the States Members for approval. Then follow two references to articles 61 (b) and 64. It you look up these Articles you will see that the first one refers to questions which the Committee consider it necessary to refer to the Members for solution; and the second one refers expressly to changes in the text of the Statutes. It is therefore, to my mind, clear that the sub-Committee regarded the Appendices which they proposed as part of the Statutes. I may further remark that in any case the present table (in Art. 34 (b)), which we are proposing to suppress, does in the most unmistakable way form part of the Statutes.

The Vice-Chairman. — The time is now ripe for us to take a vote on the sub-Committee's wording of Articles 34 (b) and 35 (a). We will now close the discussion and I will ask the Members to vote on the new text: Those who are in favour of it will please raise their hands.

Commander Brandon (British Empire). — May I ask whether my proposal can be put: namely, that the tables be considered in conjunction with these modifications.

The Vice-Chairman. — My proposal is that Members should vote first on Commander Brandon's proposal. I should prefer that the sub-Committee's work should not be regarded alone but in connection with the new table. I think we might now take the new text of Articles 34 (b) and 35 (a) and afterwards take into consideration the new table. Will those Members who are in favour of that please raise their hands.

The Committee was in favour of this proposition, with the exception of two Members.

Commander Brandon (British Empire), In reply to a question — I did not vote because I think that the two changes should be discussed together. I made the definite proposal that the new tables should be considered in conjunction with the new text. The Chairman did not see fit to put my proposal to the Meeting; therefore I was unable to vote for the proposal which has just been put to the Committee.

Commander Brandon's proposal was seconded by Captain Schweppe (Germany) and Commander Rasikotsicas (Greece).

Captain Fablet (Argentine). — When can we have that table of tonnage?

Commander Brandon (Great Britain). — May I say that I asked for those tables yesterday as a member of the sub-Committee; in the evening I was given one table; I do not quite know in what capacity. But I think any further demand for these tables should only come from the Committee, and, if the Committee will consent to a small delay, I would suggest that the Chairman might adjourn the Meeting for ten minutes to see if these tables are now forthcoming in sufficient numbers for the use of the whole Committee.

Here Captain Björset (Norway) resumed the Chair.

(The Secretary of the Committee explained that the matter was entirely out of his province and that he was not even aware of the work of the sub-Committee. He did not deal with the work of the sub-Committee except in small material arrangements. He therefore could not answer the question).

Captain Schweppe (Germany). — I wish to ask the Secretary if he can procure these lists in sufficient numbers for the Committee.

The Committee adjourned for ten minutes while the Secretary fetched the papers asked for.

Captain Schweppe (Germany). — I formally propose that we should ask the Vice-President of the Conference to be good enough to furnish the information which we require.

It is necessary that we should fix on that point, as the election, according to the time-table, is already fixed to take place to-morrow.

Do you agree that I ask the Vice-President that he should come and speak to us and give us the information we desire?

This was agreed to.

Rear Admiral Niblack (Director of I. H. B.) offered to answer questions in place of the Vice-President.

The Chairman. — I propose that Captain Fablet puts certain questions.

Captain Fablet (Argentine). — I consider that the Conference should fix the date of entry into force of the new Statutes.

Rear-Admiral Niblack (Director of I. H. B.). — I can add to that very definitely. These Statutes, to be effective, must be approved by the Governments themselves, but the tonnage is a question of fact and not a change in the Statutes. According to Article 37, the Conference can accept as an existing fact what is presented to it with adequate proof. These tables are facts and cannot be influenced by anything except documentary facts. There has been presented to the Conference the actual statement of fact of the German Government as to its tonnage. The same thing has happened with regard to Poland. They are not alterations of the Statutes, merely statements of existing facts in the records of the Bureau; if a country leaves the Bureau, the name must be struck out, as it is no longer a fact. The proposals to alter the conditions under which elections are held, as to voting for candidates and so forth, must receive the approval of the various Governments, as in the case of these Statutes before they became effective, and they must be issued, as they were issued on 1st January of last year, before being put into effect. These were not the original Statutes; these were the Statutes drawn up subsequent to the organisation of the Bureau and approved by all the various Governments; they can only be re-issued with the corrections to them by the approval of two-thirds of the Governments on the same way. The Conference may, by Article 37, incorporate as facts the statements herein added.

The Conference may decide to use which table they choose, because it is for them to name the time when the new tonnage table becomes effective.

Commander Brandon (British Empire). — May I say, Mr. Chairman that the last words of Admiral Niblack confirm, I think, exactly what Captain Fablet has been contending, namely that the Conference must fix the date on which alterations to the Statutes come into effect, and to that I would add that it is the business of this Committee to make a recommendation on that now. We have done so with regard to the adoption of the gold franc, and I think as regards all our other recommendations and alterations we ought definitely to say on what date those alterations should have effect. As regards the necessity for subsequent ratification by the Governments concerned I may say that, so far as the British Delegation is affected, we are empowered to accept alterations in the Statutes which do not involve additional large expenditure. The important question of the gold franc was specially submitted to our accounting experts before the British Delegation left England, in order that the British Delegation might be in a position to state definitely whether they could accept this proposal or not. Proposals such as alterations of these tables and alterations in the qualifications of the Directors, these the British Delegation can decide on its own responsibility and it is prepared to do so. The reason why the previous Statutes (1923 edition) were submitted to the States Members was because there was at that time no Conference. Here we have a Conference, and I maintain that the Conference is competent to take decisions on these matters, and to fix the date when those decisions become operative.

The Chairman. — With respect to Captain Brandon's words about being empowered to adopt changes, I wish to state that it is the same with Norway. We are empowered to adopt all changes except those which carry

with them heavy expenditure, We have to inform our Government, and as far as I know it is the same in the case of Sweden and Denmark.

Are there any suggestions?

The Delegate of France and the Delegate of the Argentine stated that they held similar authority.

Captain Schweppe (Germany). — It is understood that in the case of Art. 64, when a Delegate votes he does so as a Member, because if he is not authorised by his Government then he abstains from voting. These Resolutions when adopted are so adopted after having been accepted by authorised Delegates, and from this it follows that Resolutions which deal with the Statutes come into force after the acceptance of the Proposal. In this case, for instance, the elections of the Directors must be carried out on the basis of the amended Statutes. If that be so, the words of the Vice-President in the Plenary Session cannot be approved.

Admiral Niblack (Director of the I. H. B.). — The question in Art. 64 is merely whether it means "Members of the Conference" or "States Members".

Commander Brandon (British Empire). — In reply to the last remark made by Admiral Niblack, I would only say that it seems to me that the word "Members" is used because there are two different cases to provide for: one being the case of the Conference, and the other being the case of matters being referred to States Members between Conferences; and therefore I imagine that in order to save a too clumsy sentence the word "Member" has been used. But I do not think that, without some special statement to that effect, it can be assumed that subsequent to the Conference further ratification is necessary.

The Chairman. — Is that all, Captain Brandon?

Commander Brandon (British Empire). — I am sorry to take the time of the Committee again, Mr. Chairman, but whilst Admiral Niblack is here and as he has so kindly come in the place of Captain Crosley to give us information on this point, I should like with your permission, and with the permission of the Committee, to ask him whether he will be good enough to answer one or two questions which I had intended, with your permission again, to put to Captain Crosley regarding the figures given in the new tables of Shares and Votes and Contributions as regards the United States of America.

The Chairman. — Certainly.

Commander Brandon (British Empire). — In the first place, I should like to ask the Admiral whether he could kindly throw any light on the remarkable increase in tonnage which has taken place, according to these figures, between 1919 and the present year. I do not wish for one moment to question the figure now given, but, so far as the knowledge of the British Delegation goes, the figure for 1919 is too small, and I should be very glad if Admiral Niblack could kindly throw some light on this matter.

Admiral Niblack (Director of the I. H. B.). — The figures are merely a question of record in the Bureau as given by the States Members themselves, and I would suggest that the Secretary-General bring before the Committee the question of the figures for tonnage for all countries. It is a matter of being informed as to their tonnage by the Countries themselves, and then of the other calculation being made in the Secretariat. I asked the Secretary General this morning with regard to these figures once more, and he said "they are absolutely correct". As to the American tonnage, I suggest that he be required to bring before the Committee the actual figures and the correspondence on the matter, because as far as the United States is concerned, I know nothing more about it than of any other country.

The Chairman. — Is there anything else you wish to know, Captain Brandon?

Commander Brandon (Great Britain). — I should merely like to thank Admiral Niblack for his great courtesy in replying to my question as far as

he is able, and would ask you, Mr. Chairman, to put to the Committee whether the Secretary General may now be asked to attend and give the information which I asked for.

The Chairman. — Thank you very much indeed, Admiral Niblack.

Admiral Niblack withdrew. The Secretary-General was sent for.

Captain Schweppe (Germany). — I think the provisions introduced into Art. 22 are applicable for the new elections. We have to decide when the amended Statutes come into force, and the Vice-President's statement made at the Plenary Session was therefore wrong.

Commander Brandon (British Empire). — I quite agree with Captain Schweppe and I should like to propose that this Committee recommends to the Conference, when forwarding its Recommendations as regards changes of Statutes, that all the changes which may be approved by the Conference shall take effect as from the moment when they are so approved, with the exception of the change regarding the gold franc which is specially provided for in our Recommendations.

The Chairman. — Do you agree?

Commander Gerken (Chile). — I wish to point out that the Plenary Session has to decide as to Art. 64. Such changes receive the approval of at least two thirds of the Members: does that mean Members of the Conference or of the Governments?

Captain Schweppe (Germany). — Members means the Representatives of the Governments. We represent our Governments here. If we have not got that authority then we do not vote at all.

Commander Rasikotsicas (Greece). — I wanted to ask the same question. Member means Member of the Bureau and this Statute is applicable only for Members of the Bureau, but in the Conference Delegations represent States which are not Members of the Bureau. Can they vote?

The Chairman. — No.

Captain Schweppe (Germany). — Only on technical questions.

(The Secretary General presented himself).

The Chairman. — The Secretary General will kindly answer our questions regarding the tonnage.

Commander Brandon (Great Britain). — May I ask the Secretary General what is the authority for the figure of tonnage given for the United States of America in the existing Statutes, Art. 35 (a).

Commander Spicer-Simson (I. H. B.). — The figures which appear in the existing Statutes for 1923 are those which I drew up myself, assisted by Admiral Phaff. It so happened that when the discussion as to the method of voting occurred in the International Hydrographic Conference Committee in 1921, that the basis of tonnage was mentioned, and both Admiral Phaff who was in Holland, and I in England, drew up tables of tonnages. The United States had not at that time adhered to the Bureau, consequently I could not get an official statement from them as to their tonnage. I applied for information to Lloyds Register. Admiral Phaff obtained his information from some other source, they differed by about twenty to thirty thousand tons, nothing very serious — one large ship might have made the difference — and as we agreed so nearly we put down a round figure of 6,270,000 tons.

Commander Brandon (British Empire). — May I say first that in the opinion of the British Delegation this figure here should have been confirmed by the American Government, and the confirmation ought to have been sought by the Bureau.

Secondly, that according to information recently received from Lloyds

Register the tonnage of America in 1919 was approximately 15,672,000 tons, i. e. in any case more than double the tonnage given here. In 1916 it was only about 7,000,000 tons, which approximates to the figure given; and I can only suppose that, owing to the disorganisation caused by the War, a very out-of-date figure was accepted. The result of that would appear to be, in the opinion of the British Delegation, that the United States of America has paid a lower contribution than, according to the Statutes, she should have done; and arising out of that point I should like to ask the Secretary-General whether the last contribution paid by the United States of America was on the basis of 6,270,000 or on the basis of the 17,916,837 tons now put forward.

The Secretary-General. — First, may I say with reference to the statement that the figures should have been verified officially; the United States, when they adhered to the Bureau, had before them the figures that were then in the Statutes, and had they wished to correct them, they could have done so.

The answer to the question as to the payment of the last contribution is that the Statutes having been accepted, no contributions are paid except on the basis of the existing Statutes. It cannot be otherwise.

May I add that these Statutes, and the figures also, have been before the States Members and were approved by them in 1923; no question has previously been raised as to these figures.

Commander Brandon (Great Britain). — With reference to the last observation of the Secretary General, it appears to me that in the ordinary way it would be a very unusual proceeding for one State to challenge the figures given by another. The question would not have arisen now had there not been such a remarkable increase in this particular case. I agree with the Secretary-General in the opinion which he indicates, that the time for challenging the figures given here would have been when the Statutes were submitted for approval. I do not wish now to raise any question as to the arrears of payment which, if my contention is correct as to the 1919 figure, should now be due from the United States of America, but I wish to place on record that the British Delegation considers the procedure followed to have been most unsatisfactory.

The Secretary-General. — May I ask a question in connection with this statement? I should like to know on whom this reflection is made. Is it on the Bureau, or is it on the States who did not protest in 1923 when they had the opportunity?

Commander Brandon (Great Britain). — The criticism I made is of the Bureau.

The Chairman. — Has anyone anything to add?

Commander Brandon (Great Britain). — Mr. Chairman, I wish to thank you and the Committee for having listened with so much patience to my rather lengthy observations.

If the Committee now desire to proceed with the discussion of the proposal that the recommendation of the sub-Committee and the amended tables be now considered together, I should not wish to make any further observations on the matter which we have just discussed with the Secretary-General.

Captain Schweppe (Germany). — I propose that the Sub-Committee now vote on the new text of Articles 34 (b), 35 (a) and (b), 36, 37, in connection with the tables that are presented. I think it is necessary now to come to a conclusion.

Commander Rasikotsicas (Greece). — I support the proposal.

The Chairman. — Do you agree with the proposal made by Captain Schweppe?

Commander Gerken (Chile). — I wish to make an observation. In the

English text we have agreed that the table should be submitted to the States Members. I think the intention of the Committee is to put "the Delegates of the States Members", and I suggest the addition of "Delegates of the States Members"; otherwise I think it is a little misleading. I am the Delegate of the Government of Chile.

I would further suggest in regard to Articles 34 (b) and 35 (a) that alterations in the tonnage, shares and votes must be made at the first Plenary Session of the Conference. I also propose that Article 37 should read: ".....such alterations will be submitted to the first Plenary Session of the Conference for approval.....".

Commander Brandon (Great Britain). — I think if the alteration were made in Art. 37 that would be sufficient.

Commander Gerken (Chile). — I think that Article 34 (b) should read: ".....all alterations in this table shall be submitted to the Delegates of the States Members for approval at the first Plenary Session of the Conference.....".

M. Fichot (France). — If a modification takes place between two conferences, it is not possible to wait for approval until the Conference meets again. The approval of the modification must be made by the States Members.

Commander Brandon (Great Britain). — If a new State joins, obviously its contribution must take effect as from the date of its joining, without waiting for that contribution, and the tonnage on which it is based, to be submitted to the next Conference.

Captain Schweppe (Germany). — Would it not be sufficient to add to Article 37 "Such alterations would be submitted to the Conference for approval at the first Plenary Session"?

A vote was taken by a show of hands and the proposal made by Captain Schweppe was adopted unanimously.

The Chairman. — The new tables together with the texts of the new Articles have been adopted en bloc by the Committee.

M. Albert (I. H. B., Secretary to the Committee). — I will read the proposed resolution:

"The Statutes Committee is of opinion that all changes in the Statutes which may be adopted by the Conference shall take effect as from the moment at which they are so adopted, with the exception of the introduction of the gold franc, if approved in plenary session, regarding which a special recommendation has been made".

M. Fichot (France). — I am in agreement with that Statute as far as it refers explicitly to the modifications which we have already adopted, but I would not like this to be a general principle for all possible cases, because we might get into a position where Delegates could not approve of the procedure.

Commander Brandon (Great Britain). — I would then suggest, to meet the objection of M. Fichot, which I think very sound, that we should say:

"The Statutes Committee is of opinion that all the changes in the Statutes recommended by this Committee which may be adopted by the Conference shall take effect as from the moment..."

M. Fichot (France). — I am agreed.

The Chairman. — The resolution therefore reads:

"The Statutes Committee is of opinion that all the changes in the Statutes recommended by this Committee which may be adopted by the Conference, shall take effect as from the moment at which they are so adopted, with the exception of the introduction of the gold franc (if approved in Plenary Session), regarding which a special recommendation has been made".

The meeting rose at 1240.

CHAPTER VII.

The seventh meeting of the Committee was held on Saturday 6th November 1926.

ADOPTION OF TABLE OF VOTES FOR THE ELECTION.

Captain Fablet (Argentine). — I would remind the Chair that it has been decided in the Committee to request the President to state in a public Conference that he was mistaken in saying that elections would take place on the basis of the old Statutes, and that it must be understood that elections would take place on the basis of the modifications adopted.

Captain Schweppe (Germany). — It has been decided by the sub-Committee that the President should be invited to withdraw the assertion that he made in one of the first Plenary Meetings that the elections would take place on the basis of the old Statutes, and that, on the contrary, in the opinion of the Statutes Committee, all modifications of the Statutes came into force as soon as adopted by the Conference, and would be applied to the new elections.

M. Fichot (France). — I do not quite agree with the feeling of the other Members of the Committee that this resolution would be of a general nature, that is, that it would refer to all modifications to Statutes.

Captain Luymes (Netherlands). — I wish to observe that I do not think this is quite in order. We have not had time to study this matter and compare it with the *compte rendu*, and personally I do not know if it is all correct. As a mark of protest I will abstain from voting.

The Chairman. — I think we can do nothing further except postpone the meeting until Monday.

Captain Fablet (Argentine). — Mr. Chairman, I do not think the Delegate for the Netherlands has the right to make this protest here. This meeting is only here to prepare a resolution in regard to the election.

Captain Luymes (Netherlands). — I did not know that was the question, I thought we were here to take a vote on these resolutions.

The Chairman. — No, that is not the case. At the moment we have not sufficient copies to distribute.

Captain Luymes (Netherlands). — Then I withdraw my statement. I had misunderstood the position.

The Chairman. — The meeting is now adjourned.

CHAPTER VIII.

The eighth meeting of the Committee was held at 0900, on Monday, 8th November 1926.

COMPILATION OF REPORT OF THE COMMITTEE ON STATUTES.

The **Chairman**. — I declare the meeting open. So far as I understand, the real reason for this meeting is to render an account of the decisions of the Statutes Committee, and to ensure that the decisions of the sub-Committee and the Committee are in conformity.

I presume that there is no objection to the text communicated to you. There has been no serious disagreement on the decisions adopted. M. Fichot made some observations, but declared himself satisfied, and Captain Luymes also raised some questions, but these were in regard to the text and were not questions of principle.

CORRECTION OF MINUTES OF PROCEEDINGS.

Captain Schweppe (Germany). — A resolution is missing from the report of our last meeting at the Museum. I propose that this should be inserted; I suppose that can be done.

M. Albert (I. H. B., Secretary to the Committee). — This resolution is the last one which was taken at the sixth meeting. It was pointed out at the seventh meeting that I had omitted this, but the Chairman of the Committee was invited to bring his report as it stood, without the Resolution, direct to the President of the Conference at the Plenary Session which was to take place immediately afterwards, so that the collection of decisions which has been distributed has been handed to the President of the Conference with the report of the Statutes Committee. I therefore do not think it would be a right procedure to make an addition to this collection as it stands, but there is no reason why the Chairman of the Committee should not present a supplementary report to the President of the Conference to include that Resolution.

The **Chairman**. — I think the best thing to do is to prepare a supplementary report. It can be done very briefly. That will be the more convenient way, will it not, Mr. Albert?

M. Albert (I. H. B., Secretary to the Committee). — It certainly will be easier, Sir.

Captain Schweppe (Germany). — Would it not be possible to take back the copies?

The **Chairman**. — It is more correct and simpler to prepare a supplementary report. Will that satisfy Captain Schweppe?

Captain Schweppe (Germany). — I do not think it is quite sufficient if we only make a report with just the resolution, because anyone who was not present at the meetings of the Committee would not know of the deliberations which led us to the decision. Perhaps when the matter is discussed at the Plenary Session, an explanation can be given, but I do not think this would be so effective as to have a short report of the discussions in the Committee. There are a good many Members in the Plenary Session who may not agree with the resolution. Many Delegates think with Captain Crosley that the old Statutes should still be in force.

M. Albert (I. H. B., Secretary to the Committee). — May I say that a complete report of the proceedings of our meetings will be distributed to all Delegates, even to those who are not Members of the Committee.

Captain Schweppe (Germany). — I doubt whether the Members will have time to read the report.

M. Albert (I. H. B., Secretary to the Committee). — I am afraid they will not have time.

The Chairman. — I am quite in agreement with Captain Schweppe's proposal that there should be a brief supplementary report. Does anyone wish to make any observations?

Captain Schweppe (Germany). — May I express my opinion very briefly in German? (*Continued in German*). I should like to state what procedure I think should be followed. The Committee examined the question which was raised by a declaration of the Vice-President, Captain Crosley, in a certain meeting of the Plenary Session, a declaration which tended to show that the old Statutes were still in force. As the Committee was not quite clear about this, it asked to hear Captain Crosley on the subject, but, as Captain Crosley was absent, Admiral Niblack came in his stead and expressed the opinion that the Statutes could not be altered except with the consent of the Governments, and that the Conference could not alter them. The Committee, however, was of another opinion, and thought that the Heads of Delegations who were empowered by their Governments to vote could, in the name of their Governments, accept or make alterations. Admiral Niblack did not reply to that and hence the Resolution in question was adopted by the Committee.

Captain Fablet (Argentine). — I agree with Captain Schweppe's suggestion.

The Chairman. — Is there any objection?

Captain Fablet (Argentine). — I wish to point out that in the proceedings handed to us, in the report, Admiral Niblack's answer appears but not the question put to him. Anyone reading the report who was not present at the meeting would not understand the position. I think we must ask the question again; the Secretary can put that right.

The Chairman. — The solution proposed is that Captain Fablet will be good enough to put in writing for the Secretary, the questions that were put by him to Admiral Niblack, and the page will then be typed again, so that the minutes may be complete.

Captain Schweppe (Germany). — Are you all in agreement that a supplement to the decisions of the Statutes Committee shall be made by the Secretary, and that it will not be necessary to get the approval of the Committee. It is necessary now to act quickly, because the Chair must have our report as early as possible, and it has to be discussed this afternoon.

Captain Fablet (Argentine). — I quite agree that the corrections should be made and the document distributed to us as quickly as possible and before the Plenary Session, otherwise it will be of no use.

M. Albert (I. H. B., Secretary to the Committee). — I think Captain Schweppe is speaking of a summary of the whole question, and not of your question only.

Captain Fablet (Argentine). — I also mean the whole question; I am not speaking of the resumé now.

Captain Schweppe (Germany). — I shall be glad if the Secretary would arrange the matter now. The supplementary report can be made very briefly, merely one page; it can then be copied and distributed before the Plenary Session this afternoon.

The Chairman. — Captain Schweppe and the Secretary will arrange for the supplementary text.

Commander Rasikotsicas (Greece).— I wish to draw the attention of the Committee to the fact that the last resolution which we find on page 27 in the minutes of the Sixth meeting of the Committee, was not put to the vote at the meeting, and therefore has not been adopted by the Committee.

The Chairman. — I am of the opinion that all the Members of the Committee were in favour of the Resolution.

Captain Schweppe (Germany). — It is also my opinion that the matter was put to the vote and that the Resolution was adopted.

Commander Rasikotsicas (Greece). — I am not in agreement with the text of this Resolution, and I do not feel sure that it was adopted. I voted against it. I agree with Admiral Niblack that, though there may be Delegates, like myself, who are authorised by their Governments to vote for modifications to the Statutes, such modifications should be put to the Governments for their approval. Meanwhile I do not think it necessary to adopt such a procedure.

Captain Fablet (Argentine). — I remember that we discussed the question, and the Chairman asked whether anyone had any objection.

The Chairman. — Yes, I remember that quite well, and it is my impression that the resolution was adopted. Do you wish to make any reservation regarding yourself?

M. Albert (I. H. B., Secretary to the Committee). — It is not necessary to make any such statement, because it is not mentioned in the minutes that the Resolution was unanimously adopted.

Commander Rasikotsicas (Greece). — The question is not so important, because my reservation will appear in the minutes of to-day's meeting, and that will be sufficient to show that I was not in agreement.

Captain Schweppe (Germany). — I, personally, do not attach any great importance to this text. It is sufficient for me that it figures in the minutes. As Commander Brandon seemed to attach a certain value to the fact that the question should come before the Plenary Session, I thought it only fair, in his absence, to bring the matter up here.

The Chairman. — I agree with Captain Schweppe in this matter. I do not think there is any objection to his proposal in principle. If we accept the Greek Delegate's reservations, we must say that the resolution was not accepted unanimously.

M. Albert (I. H. B., Secretary to the Committee). — We can say it has been adopted by a majority.

Captain Fablet (Argentine). — I think we can adopt the suggestion made by the Vice-Chairman. If this resolution was not adopted unanimously, at least it was adopted by a majority. The matter will therefore be put before the Plenary Session in a supplementary report.

The meeting rose at 1000.

DECISIONS PROPOSED BY THE STATUTES COMMITTEE.

I. — MODIFICATIONS TO THE STATUTES.

REVISION OF LISTS OF STATES MEMBERS OF THE BUREAU.

Article 2.

Article 2 is replaced by the following :

" States which were Members of the Bureau at its creation in June 1921, those which have joined the Bureau subsequent to its establishment, and those which have withdrawn their membership, are enumerated in Appendices A, B and C.

These Appendices shall be kept up to date by the Secretary-General "

Poland and Germany shall be inscribed in the Appendix as new Members, and Belgium as having withdrawn.

CONDITIONS OF ADMISSION AS A MEMBER OF THE BUREAU.

Article 3.

Article 3 is modified as follows :

(a) " Any other State, Member or ex-Member of the League of Nations, if it so desires, shall be admitted as a Member of the Bureau on condition that it pays its proportional part in the assets of the Bureau, as given in the Balance Sheet of the Annual Report if it is admitted before July 1st, and in a balance sheet to be drawn up for July 1st if it is admitted after that date.

(b) This proportional part will be calculated as follows :

" The total amount of the assets of the Bureau, multiplied by the number of votes allocated to the new State Member according to its tonnage, and divided by the total number of votes allocated to the aggregate States Members before the admission of the new Member.

(c) " The admission of States which are neither Members nor ex-Members of the League of Nations, will be decided by the vote of the Members of the Bureau, and not less than two-thirds of the number of these must give their consent to such admission, which implies the financial obligation mentioned in Article 3 (a) and (b). "

DELAY IN PAYING CONTRIBUTIONS.

Article 4 (b).

Article 4 (b) is modified as follows :

" Any State Member which does not pay the full contribution due shall be given two years in which to make good the deficit, beginning with the first notice given by the Directing Committee ;

SUSPENSION OF MEMBERSHIP.

Article 5.

Replace 5 by 5 (a).

Insert 5 (b).

" If its financial obligations to the Bureau are not settled before the withdrawal is notified, that State shall be expelled from Membership.

PRECEDENCE OF DIRECTORS.

Article 22.

The following sentence is added to Article 22 (i) :

“ Their order of precedence and the method of their election are regulated by Articles 59 and 60 ”.

CONDITIONS OF ELIGIBILITY FOR DIRECTORS.

The words “ at least two of them ” of Article 22 (ii) are deleted.

Paragraphs (iii) and (v) of Article 22 are deleted. Consequently paragraph (iv) becomes (iii).

The following paragraphs are added to Article 22.

SICK LEAVE OF DIRECTORS.

“ (iv). A Director, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be a Member of the Directing Committee.

TRIENNIAL LEAVE OF DIRECTORS.

“ (v) In every three years of service, each Director is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him ”.

PREPONDERANT VOTE FOR THE PRESIDENT OF THE DIRECTING COMMITTEE.

Article 26.

Add to Article 26 :

“ If only two Directors attend a Committee meeting and a decision cannot be postponed to a full meeting, the vote of the President or of the Acting President shall be preponderant ”.

Article 29.

Paragraph (b) is omitted, a reference to art. 60 being added to paragraph (a). Therefore (c) and (d) become (b) and (c), and the two following paragraphs are added :

SICK LEAVE OF THE SECRETARY GENERAL.

“ (d) The Secretary-General, having been incapacitated for duty for six consecutive months, or for an aggregate of twelve months, if not consecutive, during his mandate, shall automatically cease to be Secretary-General.

TRIENNIAL LEAVE OF THE SECRETARY GENERAL.

“ (e) In every three years of service, the Secretary-General is entitled to two months' leave, exclusive of travel time, for the purpose of visiting his own country, and reasonable travelling expenses to and from his home or official residence shall be refunded to him ”.

REELIGIBILITY OF THE SECRETARY GENERAL.

Article 31.

Article 31 is replaced by the following :

“ He may be nominated as a candidate for the post of Secretary-General at the next election ”.

ADOPTION OF GOLD FRANC AS THE MONETARY STANDARD FOR THE BUREAU.

Article 33.

Replace in Article 33 and in all the other articles in which they appear, the words: " Swiss francs " by " gold francs ".

This modification will take effect from 1st January 1927.

REVISION OF THE TABLES OF TONNAGES

Article 34.

Article 34 (b) is modified as follows:

" The tonnages taken for the purpose of determining the contributions of the States Members are given in Appendix D, which is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Articles 61 (b) and 64) ".

REVISION OF THE TABLES SHOWING SHARES, VOTES & CONTRIBUTIONS.

Article 35.

Article 35 is replaced by the following:

" 35. (a) The scale given in Article 34 (a) (iii) determines also the number of votes allocated to each Member in the elections for the Directors and Secretary General (see Articles 59 and 60). The number of votes is the same as the number of shares. The table which shows the shares, votes and contributions of the States Members is contained in Appendix E and is to be kept up to date by the Directing Committee. All alterations in this Table shall be submitted to the States Members for approval (see Articles 61 (b) and 64).

" (b) The Principality of Monaco is treated on a special basis. To it are allotted two votes and its annual contribution is fixed at 6,000 French francs paper ".

Article 36.

The following alteration is made in Article 36:

In line 3 of this article, for " the tonnages and consequently the Table of contributions and votes " read " Appendices D and E ".

REVISION OF THE TABLES (Appendices D & E) FOR ELECTIONS.

Article 37.

Article 37 is replaced by the following:

" To become effective in the election for the Directors and Secretary General, alterations which Members consider should be made in Appendices D and E must reach the Directing Committee at least ten days before the opening date of a Conference. Such alterations will be submitted to the Conference for approval at the first Plenary Session.

" In the case of a bye-election, any alterations proposed must reach the Bureau not later than the latest date fixed for the receipt of the lists of candidates ".

Appendices D and E proposed for the elections which are to take place.

APPENDIX D.

<i>States.</i>	<i>Tonnages</i>
ARGENTINE	220,000
BRAZIL.....	315,000
BRITISH EMPIRE (U. K. & Australia)	20,850,000
CHILE	152,000
CHINA	446,000
DENMARK	875,000
EGYPT	(under) 50,000
FRANCE	3,978,340
GERMANY	3,225,662
GREECE	978,000
ITALY	1,765,000
JAPAN.....	4,670,048
MONACO	(under) 50,000
NETHERLANDS	2,581,853
NORWAY	2,615,000
PERU.....	55,000
POLAND	3,350
PORTUGAL.....	239,906
SIAM.....	23,407
SPAIN	870,000
SWEDEN.....	1,362,500
U. S. OF AMERICA.....	17,916,837

APPENDIX E.

<i>States Membres</i>	<i>Shares and Votes</i>			<i>Contributions gold francs</i>
	<i>fixed</i>	<i>sup.</i>	<i>Total</i>	
ARGENTINE.....	2	2	4	8,000
BRAZIL	2	2	4	8,000
BRITISH EMPIRE (U.K. & Aus- talia) :.....	2	15	17	34,000
CHILE.....	2	1	3	6,000
CHINA.....	2	3	5	10,000
DENMARK	2	4	6	12,000
EGYPT.....	2	—	2	4,000
FRANCE.....	2	7	9	18,000
GERMANY.....	2	6	8	16,000
GREECE.....	2	4	6	12,000
ITALY.....	2	5	7	14,000
JAPAN	2	7	9	18,000
NETHERLANDS.....	2	6	8	16,000
NORWAY	2	6	8	16,000
PERU	2	1	3	6,000
POLAND	2	—	2	4,000
PORTUGAL	2	2	4	8,000
SIAM	2	—	2	4,000
SPAIN.....	2	4	6	12,000
SWEDEN	2	4	6	12,000
U. S. OF AMERICA.....	2	13	15	30,000
	42	92	134	268,000
MONACO.....			2	6,000 francs paper.

LOWER LIMIT OF EXPENDURE REQUIRING ONE DIRECTOR'S APPROVAL.

Article 43 (b).

The words " French francs paper " are replaced by " gold francs ".

DATE OF ISSUE OF ANNUAL REPORTS—LISTS OF OFFICIAL REPRESENTATIVES.

Article 45.

Article 45 is replaced by :

" (a) In the month of January of each year or when the Auditor of the League of Nations has made his Report, the Bureau will publish an Annual Report on its work and finances.

" (b) A list of the official Representatives of the Members and their respective addresses shall be included in the Annual Report.

DATE OF ISSUE OF ESTIMATES.

" (c) The Directing Committee shall draw up and publish annually, during the month of September, estimates of receipts and expenditure for the following year, with all necessary explanations ".

Article 48.

(Suppressed).

Article 49.

Becomes Article 48.

PARTICIPATION OF LEAGUE OF NATIONS IN CONFERENCES.

Article 50.

Becomes Article 49.

Insert between " Members " and " and the Directing Committee " the words : " Representatives of the League of Nations in a consultative capacity ".

Article 51.

Becomes Article 50.

LANGUAGES USED AT CONFERENCES.

Article 51 (new).

" The languages used at the Conferences shall be English and French

APPOINTMENT OF COMMITTEES BY CONFERENCES.

Article 55.

Article 55 (a) is modified as follows :

" Periodic Conferences will specially examine the reports of the Bureau as to its work and its finances since the last Conference. For this purpose, in their early stages, small committees will be nominated, the conclusions of which will be submitted to a Plenary Session of the Conference.

EARLY DESPATCH OF PREPARATORY REPORTS FOR CONFERENCES.

Article 56.

Article 56 (a) is modified as follows :

An addition is made in the last sentence, between the words " This " and " shall be dispatched ", so that it will read :

" This, together with the report on the Work of the Bureau and its finances since the last Conference, mentioned in Article 55 (a), shall be dispatched to the Members six months before the proposed date of meeting ".

PROCEDURE TO BE FOLLOWED FOR BRINGING SUBJECTS BEFORE CONFERENCES.

Article 56 (b) is modified as follows :

" No subject, which is not included in the final schedule, shall be discussed unless it is proposed by at least three of the Delegations of the Members ; the President of the Conference must be notified, in writing, not less than 24 hours beforehand, of the intention to introduce such subject ".

Article 58.

The last line of Article 58 (c) is modified as follows :

" case of the elections referred to in Article 59 (ix) ".

PREPARATION AND DISTRIBUTION OF LISTS OF CANDIDATES.

Article 59.

Article 59 (iv) is modified as follows :

" The Bureau will then collate the lists sent by the States Members and present them to each Delegation at the opening of the Conference, with copies of the notes referred to in paragraph (ii) of this article ".

Article 59 (vii).

The last sentence is modified as follows :

" The principles of Article 58 (a) and (b) will apply ".

INTERPRETATION OF TEXTS.

Article 65.

The last sentence of Article 65 is modified as follows :

" Should any divergence be found in the meaning of the two texts, the Directing Committee will decide on the precise interpretation ".

II. — OTHER QUESTIONS SUBMITTED TO THE STATUTES COMMITTEE.

Application of the decisions made at the Conferences.

" The Committee, having discussed the Netherlands proposal, expresses the wish that the Bureau should study the publications and charts of States Members, correspond with those States Members which have not carried out the resolutions of the Conference, in order to know their reasons, and classify the replies so that they may be discussed by a future Conference ".

Rapid dissemination of Publications.

The Committee adopted the British proposal :

" That it would be of great assistance if the various States Members of the Bureau could, during the Conference, be impressed with the desirability of dispatching new editions of charts and navigational books as soon as possible after publication ".

MODIFICATION OF ARTICLE 34 OF THE STATUTES and Statements of the two Directors.

These two questions were examined together.

REDUCTION OF CONTRIBUTIONS.

1. Concerning the reduction of contributions, the Committee adopted the following resolution :

" After careful consideration and consultation with the Finance Committee, the Statutes Committee are inclined to the view that it should be possible to effect a reduction in the scale of contributions of the States Members without impairing the efficiency of the Bureau. As, however, the existing uncertainty as to the future movements of the French franc renders it impossible to form a reliable estimate of the relation between receipts and expenditure during the next five years, the Committee do not wish to alter the Statutes at the present time. But they consider that the new Directing Committee should thoroughly explore the financial situation of the Bureau, obtaining, if necessary expert assistance from one or more of the States Members, and at the end of the next financial year should render a full report on the matter to all the States Members, indicating, in particular, what economies have been or can be effected ".

REDUCTION OF DIRECTORS' SALARIES.

2. The Committee rejected the reduction of Directors' salaries proposed by Admiral Phaff.

SUPPRESSION OF THE SECRETARY GENERAL.

3. The Committee rejected the suppression of the Secretary General, and approved the following resolution :

REGULATIONS FOR THE INTERNAL ORGANIZATION OF THE BUREAU.

“The Directing Committee to be elected ought to consider as its first and principal duty, to be fulfilled as soon as possible, the formation by it of an internal organisation of the Bureau and of rules which guarantee that the very considerable credits entrusted to the Bureau by the Conference shall be employed as effectively as possible in the carrying out of the work of the Bureau as ordained by the Statutes.

“These new rules should be communicated to the States Members immediately upon their adoption”.

PROPOSALS REJECTED BY THE COMMITTEE

(see: "Proposals made....")

The following proposals have been rejected by the Committee in addition to those above-mentioned :

Modification of Article 6	(iii)	proposed by the Bureau.
" " "	9 (a)	" " " "
Addition to	10 (d)	" " " "
Modification of	22 (i)	" " " "
Addition to	22 (ii)	" " Sweden.
" " "	23	" " the Bureau.
Modification to	28	" " " "
Addition to	46 (b)	" " " "
Modification of	57 (a) & (b)	" " " "
" " "	59 (iv)	" " " "
Suppression of	59 (vii)	" " " "
" " "	59 (viii)	" " " "
Additions to	60 (i)	" " " "
Suppression of	60 (iv)	" " " "
Modification of	60 (v) & (vi)	" " " "

The Swedish proposal relative to Article 59 (iv) was withdrawn by Com-modore Reinius in the course of discussion.

SWEDEN proposed to change the article into :

" The Bureau will then prepare two lists, one showing the candidates for the Directorship and the other showing those for the Secretaryship, which lists, with copies of the notes referred to in (ii), together with a table of commendatory qualifications for each candidate, will be referred to a Committee, consisting of three Hydrographers from different countries, none of whom belongs to any country presenting a candidate.

" This Committee shall examine these tables and present a list containing the names of all the candidates in order of merit, the Delegates need not however take this order into consideration at the final election.

" This Committee, together with five Deputies, selected from among the Delegates, shall be elected by the Delegates at the Conference and shall act until the next periodic Conference."

SUPPLEMENT

TO THE DECISIONS OF THE STATUTES COMMITTEE.

The Statutes Committee came back to a decision given by the Vice-President in the Plenary Session on 2nd November 1926. According to the minutes, (page 3) Captain Crosley said :

" Please consider for the moment the Statutes governing the election of Directors. The Chair is informed that some have thought that this Conference can change those Statutes so as to affect the coming election. This is obviously inadmissible "

The Statutes Committee was of opinion that this statement could not remain uncontradicted. It, therefore, decided to hear Captain Crosley on the subject. In the absence of Captain Crosley, Admiral Niblack stated that the opinion expressed by Captain Crosley was considered by him to be in order, as any modification of the Statutes needed the approval of the Governments (Art. 64 of the Statutes). The Committee, however, thought that Delegates taking part in any vote were the authorised representatives of their Governments, and that in consequence any amendment adopted by a two-thirds majority fulfilled the provisions of Article 64.

Under these conditions the following resolution was adopted by the majority of the Committee:

COMING INTO FORCE OF CHANGES IN STATUTES.

“ The Committee decides that all changes in the Statutes recommended by this Committee which may be adopted by the Conference shall take effect as from the moment at which they are so adopted, with the exception of the introduction of the gold franc if approved in Plenary Session, regarding which a special recommendation has been made ”.

PART III.

B.

MEETINGS OF COMMITTEE ON FINANCE.

LIST OF MEMBERS OF THE COMMITTEE.

Chairman : Captain H. P. DOUGLAS.

Vice-Chairman : Ingénieur Hydrographe en Chef DE VANSAY DE BLAVOUS.

Bayram, Mahmoud Bey	-	-	-	-	-	Egypt.
Björset, Captain	-	-	-	-	-	Norway.
Gallépe, Monsieur B.	-	-	-	-	-	Moraco.
Hooykaas, Captain	-	-	-	-	-	Netherlands
Reinius, Commodore	-	-	-	-	-	Sweden.

Secretary,
Lieutenant G. ALBERT (I H B)

REPORT ON THE FINANCIAL ADMINISTRATION : Part I. C Page 339.

RESOLUTIONS PROPOSED BY THE COMMITTEE : Page 339.

RESOLUTIONS ADOPTED BY THE CONFERENCE : Part I, E Page 98.

CHAPTER I.

The first Meeting of the Committee was held at 0930, on Saturday, 30th October 1926.

ARREARS OF CONTRIBUTION OF BELGIUM.

The Chairman. — The Meeting is open. I think we might deal with the question of Belgium's arrears first of all. This question has been referred to this Committee by the Plenary Session. The Bureau has suggested that the only way to settle the trouble is to request a decision of the League of Nations.

I myself had occasion to consult Mr. Harada, the Japanese Member of the Secretariat, and he was of opinion that whatever goodwill the League might wish to show in the matter, it could not do anything at all. Apparently the opinion here was that the League of Nations was a kind of debt-collecting institution, but the League does not think it is.

Commodore Reinius (Sweden). — I think the only thing we can do is to agree to the proposal of the Bureau; even if the League of Nations is not a debt-collector, I think it might be able to bring a little pressure to bear.

M. de Vanssay (France). — The Bureau can certainly not exert pressure in this matter and I therefore agree with Commodore Reinius.

The Chairman. — I believe that the Bureau has already approached the League of Nations on the matter. Is that not so?

M. Albert (I. H. B., Secretary to the Committee). — I do not think so.

The Chairman. — I thought so from looking at the statements on Pages 186 to 189 of the "Work done by the Bureau".

M. Albert (I. H. B., Secretary to the Committee). — No, I do not think any request was sent to the League and I do not remember any, and certainly nothing is mentioned here. The correspondence has been exclusively with Belgium and the States Members.

The Chairman. — What does Captain Hooykaas think?

Captain Hooykaas (Netherlands). — I do not see what can be done.

M. de Vanssay (France). — It seems to me that the Bureau can merely express regret that Belgium has withdrawn, but a Statute cannot be altered on account of one State alone.

The Chairman. — Belgium has already withdrawn since the beginning of 1925. It is therefore only a question of an old contribution which is owing.

M. Albert (I. H. B., Secretary to the Committee). — May I give a brief summary of what happened. Belgium had not paid its contribution for a long time and when urged to do so answered that the Government had never intended to pay 8,000 Swiss francs, but 8,000 Belgian francs. At that time the Belgian franc was much higher than when the discussion was started, and therefore the question, after some correspondence, was referred to the States Members who could not accept the modification to the Statutes. This incident occurred after the Monaco contribution had been reduced. Belgium wanted to take advantage of that and asked for a similar privilege.

M. de Vanssay (France). — The case of Monaco was quite a special one.

The Chairman. — Agreed. After all, Belgium has got some shipping.

Captain Hooykaas (Netherlands). — Seeing that Belgium has retired cannot we let the matter rest there ?

Commodore Reinius (Sweden). — Could we not write to the League of Nations and protest ?

The Chairman. — I do not think the Bureau can expect a decision of the League of Nations on the subject. It will be merely a matter of form. Meanwhile it would be interesting to know whether it would cost the Bureau anything to ask the League to take up this matter.

M. Albert (I. H. B., Secretary to the Committee). — If it goes to the Legal Section of the League of Nations I do not see why it should cost anything. Of course if it went to the Permanent International Court of Justice then...

M. de Vanssay (France). — If we sent it to the Legal Section we should no longer be the only ones entitled to judge the position. At present we are both judge and party interested.

The Chairman. — I suggest as a reply to this proposal of the Bureau that the Committee consider that the matter should be referred to the League of Nations with a view to an attempt being made to recover the arrears. But at the same time we do not consider that any expense should be incurred by the Bureau in attempting to recover the money.

Captain Hooykaas (Netherlands). — I see the matter in this light : I think it is rather for Belgium to protest than for us to protest. I think we are quite indifferent as to whether we get this money or not, and therefore I think Belgium should protest and not we.

M. Albert (I. H. B., Secretary to the Committee). — Protest against what ?

Captain Hooykaas (Netherlands). — Because we asked for the money.

M. Albert (I. H. B., Secretary to the Committee). — The Bureau did not expel Belgium. It was Belgium that wrote an official letter saying that in view of the position it would withdraw.

Captain Hooykaas (Netherlands). — Then why take the matter up again ?

M. Albert (I. H. B., Secretary to the Committee). — Belgium has withdrawn but has not paid for the period during which it belonged.

The Chairman. — Personally I should like to see the matter closed, but if the majority want to bring it before the League of Nations then I will not oppose it.

Commodore Reinius (Sweden). — It may have some importance in the future. Another country might withdraw and we must not create a precedent by merely accepting such action without protest.

The Chairman. — Of course there is the other way of dealing with the subject. I have already suggested it in private to one Member ; that is for us as States Members to report to our respective Governments, and then the Governments could — if they saw fit — protest to the Belgian Government.

Captain Hooykaas (Netherlands). — I do not think any Government would do that.

Commodore Reinius (Sweden). — Nothing would result from it in my opinion.

M. de Vanssay (France). — I do not think Belgium is much interested in the Bureau. There is no Belgian Hydrographic Service and Belgium is not interested in the work we are doing.

The Chairman. — Work of this kind is done by the Belgian Minister of Public Works.

Captain Hooykaas (Netherlands). — All that they do is some controlling work in the Schelde river.

The Chairman. — Shall that Resolution which I read out be adopted ?

The Resolution is adopted.

The Proposal of the Bureau is therefore not adopted.

FINANCIAL ADMINISTRATION.

The Chairman. — Have you all had this Report on the Financial Administration for some days ?

Captain Hooykaas (Netherlands). — I certainly have.

The Chairman. — Everyone has not seen it and read it, and I therefore propose firstly to go through this book before touching on the "Proposals", and where one affects the other we can take it up.

M. Albert (I. H. B., Secretary to the Committee). — The work in the "Proposals" has been turned over to the Statutes Committee.

The Chairman. — Then there is nothing in the "Proposals" that affects the work of the Financial Committee.

M. Albert (I. H. B., Secretary to the Committee). — 'This official' Report is a statement of the financial position during the past five years.

The Chairman. — I think the Committee will see from the Preface that it is not an extract from the Accounts, only a general review of the Financial Administration. Page 5 shows the Bank deposit and Reserve.

M. Albert (I. H. B., Secretary to the Committee). — All the figures given in this Report are in Swiss francs.

The Chairman. — Where are the 200,000 francs (in sterling) deposited ?

M. Albert (I. H. B., Secretary to the Committee). — At Barclay's Bank here at Monaco.

The Chairman. — Does any Member of the Committee wish to speak on the deposits ?

Commodore Reinius (Sweden). — Will these deposits be seen by the Committee ?

M. Albert (I. H. B., Secretary to the Committee). — As you like.

The Chairman. — Were they seen by the Auditor of the League of Nations ?

M. Albert (I. H. B., Secretary to the Committee). — Yes, at the beginning of each year.

The Chairman. — When was the last audit of the League of Nations ?

M. Albert (I. H. B., Secretary to the Committee). — In April 1926 for the year 1925.

The Chairman. — I understand that the question of book-keeping has been considered closely by the League of Nations and that they have advised the way in which it should be done.

M. Albert (I. H. B., Secretary to the Committee). — At the beginning Commander Spicer-Simson kept the accounts as one would one's own cash account. At that time the accounts were small and that method sufficed. But later on the accounts developed, especially when the deposits were kept in several currencies. In 1924 Mr. Watterson, Chief Accountant of the League of Nations who came to audit the accounts of the Bureau said it would be necessary to have a balance sheet that is, a statement of liabilities and assets, at the end of each year. You will find this mentioned on Page 8 of Report.

That was impossible with the system of accounts used at that time and we had to start a new system. I knew something about it, and I drafted a system which was submitted to the League of Nations and approved by Mr. Watterson. In order to get a balance sheet out at the end of the year we had to use the double entry system, the same system as is now used in French Government Offices.

The Chairman. — The same system is used in England, also in the Navy.

Have the Members of the Committee any remarks to make on the present system of book-keeping? None. Well then I propose to pass on to the Estimates of Expenditure (Page 10).

M. Albert (I. H. B., Secretary to the Committee). — May I say a few words? Mr. Watterson in his Report criticised not only the accounts of the Bureau but also the Statutes. He said amongst other things that our Estimates of Expenditure as provided for in the Statutes did not mean anything because we were not bound by them. The Directing Committee, for instance, estimates the expenditure, but there is no reason why the Bureau should not go beyond the amounts provided for in the Estimates because there is nothing in the Statutes which binds the Bureau. I do not think there is any reason for making the Estimates binding; it would only mean that all the items in the Estimates of Expenditure would be inflated so as to ensure having a sufficiently large budget.

The Chairman. — Estimates are binding in Government Departments.

M. de Vanssay (France). — Did the League of Nations Representative protest?

M. Albert (I. H. B., Secretary to the Committee). — No, but he did not approve; he merely mentioned in the Report that the Estimates had no real meaning.

M. de Vanssay (France). — He disapproves because the Estimates are not compulsory?

M. Albert (I. H. B., Secretary to the Committee). — Yes.

The Chairman. — Are there any suggestions?

M. de Vanssay (France). — No.

Commodore Reinius (Sweden). — No, I think not, but I have not read the Report, I have only just had it and have not had time to read it. Is the League of Nations Representative satisfied now?

M. Albert (I. H. B., Secretary to the Committee). — He merely criticised our methods.

The Chairman. — The Committee have taken note of the explanations of the Estimates and approve the procedure which is being followed at present.

CONTRIBUTIONS.

We will now pass on to Page 12: Receipts during the five years under consideration. I should like to ask M. Albert whether there are any outstanding contributions — any which have not yet been paid.

M. Albert (I. H. B., Secretary to the Committee). — The only contribution in arrear. I do not refer to 1926 contributions because they can come in — to the end of the year — but for 1925 the only arrear is Brazil. We have received all the other contributions for 1925 and a good number of those for 1926.

On the 1st October 1926 the outstanding total was 49,000 Swiss francs, out of that 8,000 francs from Brazil for 1925.

The Chairman. — Has there been any correspondence with Brazil on the subject?

M. Albert (I. H. B., Secretary to the Committee). — Yes. Of course Brazil will pay — it is a question of administration, not of bad will.

The Chairman. — What was the latest date on which it was due? Would it be the 1st January 1926?

M. Albert (I. H. B., Secretary to the Committee). — Before the 1st January 1926.

The Chairman. — When do the subscriptions come in?

M. Albert (I. H. B., Secretary to the Committee). — Our financial year starts on the 1st January, so we can get subscriptions up to the 31st December, but this does not correspond with the financial year of all the States. Brazil's financial year, for instance, starts on 1st July.

The Chairman. — Captain Brandon tells me that most contributions used to be paid in advance and most nations have gone on doing that. Has Brazil been in arrears before?

Commodore Reinius (Sweden). — Our financial year in Sweden begins on the 1st July and we pay our subscriptions about the 10th July.

The Chairman. — They are late. Does the Committee wish to remark upon it?

Commodore Reinius (Sweden). — Could not some informal steps be taken?

The Chairman. — Has the Bureau made any official remarks?

M. Albert (I. H. B., Secretary to the Committee). — Yes, we sent a reminder and mentioned in particular the 1925 contribution.

The Chairman. — We will come back to this at a later meeting.

The statutory income has been diminished by Belgium's withdrawal, although Poland has entered.

M. Albert (I. H. B., Secretary to the Committee). — The contribution of Poland is not yet officially known because they have not sent us the amount of their tonnage. I think we may assume that their tonnage is below 50,000 tons, in which case they will pay only 4,000 Swiss francs.

M. de Vanssay (France). — Which is the Committee which will fix the new tonnages.

The Chairman. — The Statutes Committee.

M. Albert (I. H. B., Secretary to the Committee). — It is mentioned in the "Proposals". Germany, from the information given, has the same tonnage as France. They have eight votes and their contribution is 16,000 Swiss francs.

The Chairman. — Page 133 of the "Proposals", Art. 34 (b) and 35 (a) refer to the Statutes, so that they will have to be referred to the Statutes Committee.

M. Albert (I. H. B., Secretary to the Committee). — Yes, it comes up before that Committee.

The Chairman. — I think we have finished the question of contributions. It is satisfactory with the one exception, which, as I have already said, we will take up later.

SALE OF PUBLICATIONS.

Now for — Page 13 of the Financial Report. From the figures given the sale is not what one might call big.

M. Albert (I. H. B., Secretary to the Committee). — It is steadily increasing. In 1925 receipts were 384 Swiss francs, and they reached 404 frs. for the beginning of 1926 only. It means a fairly big increase.

Commodore Reinius (Sweden). — It will take some time before these publications will be known.

M. Albert (I. H. B., Secretary to the Committee). — The Directing Committee has not looked upon itself as a Publishing Office working for profit, there is a large free distribution made and although we have tried to increase the sales that has not been the primary object.

Captain Hooykaas (Netherlands). — I do not think it will ever become a profitable business.

The Chairman. — I should like to refer you to Statement A at the end of the Report, the table there shows under (e) that in 1922, 1,189 frs. were spent on Publications and in 1925 over 25,000 francs. This year it will amount to much more.

M. Albert (I. H. B., Secretary to the Committee). — This comes under Examination of Expenditure, Page 26 of the Report.

The Chairman. — It goes up to the 1st September only, and as the Note II, on Page 26 says; it has not been found possible to give the cost of of each separate Publication for, in many cases, the Printer's bills are very complicated and give inclusive figures referring to more than one publication.

M. Albert (I. H. B., Secretary to the Committee). — In some cases it would have been possible but in others not, because the printer often sends a bill for several Publications or part of one publication and part of another and I am afraid it is necessary to be a printer to understand printers' bills.

The Chairman. — It points to the fact that you want a person who really understands printing questions to deal with them.

M. de Vanssay (France). — I think the Bureau finds it hard to get printers or lithographers here in Monaco.

M. Albert (I. H. B., Secretary to the Committee). — Yes. There is a good firm here but they are so slow that we went to Paris to the "Société des Editions Géographiques Maritimes et Coloniales". We had trouble because they are publishers only and send their printing to be done at Orléans. It was also a slow business and they were not interested in doing our work. Then we went to Cannes and to Nice and are fairly satisfied. They are fairly quick and at any rate we can go there and give detailed instructions which was not possible while we dealt with Paris.

The Chairman. — Is it not possible for the Bureau to obtain an estimate before the work is handed over to the printer?

M. Albert (I. H. B., Secretary to the Committee). — We have tried it. One Director tried it once and the estimate he obtained was higher than what we actually paid in other places. On the other hand, since I joined the Bureau we find that, when the manuscript of a publication is ready, it has to be printed at once and you cannot ask for an estimate without letting the printer have the manuscript beforehand. I do not think the prices we pay are high.

M. de Vanssay (France). — Is it necessary to reproduce in the *Hydrographic Review* the special publications which have already been issued?

M. Albert (I. H. B., Secretary to the Committee). — It is not a very expensive proceeding, it is only a question of paper.

Captain Hooykaas (Netherlands). — It is of no great use. If however we want to go into this question we need first of all a detailed statement.

M. Albert (I. H. B., Secretary to the Committee). — We can get the detailed statement from the accounts.

The Chairman. — I wanted to know whether any estimates were obtained and what the procedure was.

M. Albert (I. H. B., Secretary to the Committee). — We have obtained an estimate in some cases, for the Charts of Buoyage and Port Signals of Admiral Niblack which were printed at Nice. The estimates were kept to by the printer.

Captain Hooykaas (Netherlands). — You should yourself make an estimate before sending the manuscript away.

Commodore Reinius (Sweden). — Are the printers in France not used to making estimates?

M. Albert (I. H. B., Secretary to the Committee). — Not often.

M. de Vanssay (France). — In Paris we always ask for an estimate.

Commodore Reinius (Sweden). — It should be done. Could not the Bureau perhaps get the publications printed by the Government printers? Is there a Government Printing Office?

M. Albert (I. H. B., Secretary to the Committee). — Yes, the Imprimerie Nationale.

M. de Vanssay (France). — Most of our work at the Hydrographic Office is done by the Imprimerie de l'Etat. We get estimates but the printers do not always keep to them.

M. Albert (I. H. B., Secretary to the Committee). — I think they are very expensive.

M. de Vanssay (France). — Not very.

The Chairman. — I touch on this because my Government is rather concerned with the prices at which the Bureau documents are published.

M. Albert (I. H. B., Secretary to the Committee). — I can give you an idea as I have the accounts here. For instance, we paid for the "*Report on the Work of the Bureau*" both editions French and English, 13,000 French francs, that is about 2,200 Swiss francs. We had 125 French copies and 250 English ones. These are, of course, like two distinct books because the texts in the two languages have to be set up in type separately. This was done at Nice.

The Chairman. — Was the text done by the Bureau?

M. Albert (I. H. B., Secretary to the Committee). — Yes.

The Chairman. — That book to which you refer is not for sale, only for the Conference?

M. Albert (I. H. B., Secretary to the Committee). — Yes. We have a Special Publication N° 13, Tables only, which cost 32,000 French francs, that is about 6,000 Swiss francs.

The Chairman. — Is that on sale?

M. Albert (I. H. B., Secretary to the Committee). — Yes, at 5 Swiss francs. We had, I believe, a thousand copies of it.

The Chairman. — To continue what my Government are worried about: They have formed the idea from the examples which they called for and have seen that the sale price was a long way below the market value, and they are of opinion that if the publications are of interest to scientists generally they should be priced at a figure more nearly approaching their real value. In this actual case which M. Albert gives us we have a publication of 1,000 copies costing 32,000 francs and it is being sold for 5 francs.

M. Albert (I. H. B., Secretary to the Committee). — Excuse me, 5 Swiss francs. The difference will be that what costs about 6 francs is sold for 5, but we distribute a number of them free of charge.

The Chairman. — That was one of the remarks made to me.

M. de Vanssay (France). — It might be possible to find a printer to

whom we might give the monopoly for the Bureau's publications and he might then give us more favourable rates.

M. Albert (I. H. B., Secretary to the Committee). — But if you look at the invoices I do not think you will find the price high. We employ three different printers and their prices are more or less on a level.

The Chairman. — As we are on the question of publications I should like to suggest for discussion whether we should report to the Plenary Session, that we think the prices of the publications should be increased so as to be nearer the market price.

M. de Vanssay (France). — I agree. I do not think we shall have fewer customers on that account.

The Chairman. — It cannot possibly have a bad effect and it may increase the receipts of the Bureau.

Commodore Reinius (Sweden). — If you sell a publication you must sell it for a reasonable price. If you give it away then that is another matter.

The Chairman. — Do you agree?

Captain Hooykaas (Netherlands). — Yes, only it is difficult. Very often you sell more if the price is low.

Commodore Reinius (Sweden). — You must keep the thing on a business footing. You can get more money for a good publication, but for a bad publication, of course not.

M. Albert (I. H. B., Secretary to the Committee). — That is a difficult point. There have sometimes been suggestions to make Spanish an official language of the Bureau and it would have an enormous repercussion on the publications; three editions instead of two would increase the price by half, and the personnel of the Bureau would have to be increased.

The Chairman. — I do not think we need worry our heads about that. I suggest for the consideration of the Committee that we put to the Plenary Session "that this Committee is of opinion that the publications should be priced nearer to their market value of production".

Captain Hooykaas (Netherlands). — Is that the same thing as "prix de revient"?

M. Albert (I. H. B., Secretary to the Committee). — No, it is 'le prix courant sur le marché'.

M. de Vanssay (France). — That is difficult to fix.

M. Albert (I. H. B., Secretary to the Committee). — Of course we have been influenced I think, by the fact that the price of scientific publications in France is very much lower than anywhere else, and thus prices which seem to you very low are practically prohibitive for many French people. We have very few customers in France who could afford to pay 5 Swiss francs.

M. de Vanssay (France). — I think it would be better to say 'cost price' than 'market price'.

The Chairman. — I have no objection.

Commodore Reinius (Sweden). — Are the sales organised? All over the world, I mean.

M. Albert (I. H. B., Secretary to the Committee). — Some Hydrographic Offices have agreed to publish the list of the Bureau's publications with the list of their own publications. The "Nautical Magazine" (British) gives an advertisement free of charge in each number. That is all we have done.

Commodore Reinius (Sweden). — Do you think that is enough?

M. de Vanssay (France). — Are there any booksellers who might be interested in the publications?

M. Albert (I. H. B., Secretary to the Committee). — We allow 30 per cent to booksellers and receive a good many orders through them. We tried to arrange to keep a stock at Challamel's at Paris; but he did not sell a single number in a year, so we gave it up.

The Chairman. — Does Commodore Reinius think we should go in for propaganda?

Commodore Reinius (Sweden). — I am very much interested to see how this is organised. With all due deference to the Bureau I cannot help thinking that it has been a little slack in this matter. In my own country we are very much interested in all these subjects, not only the Hydrographic Office but also the Waterways Board; technical schools are also interested. I think we ought to make greater efforts to increase the sales and to get the publications better known:

The Chairman. — To whom were these sold?

M. Albert (I. H. B., Secretary to the Committee). — To various people.

The Chairman. — Individual customers?

M. Albert (I. H. B., Secretary to the Committee). — Yes. We have a few regular subscribers and a few libraries, not many of the latter as most of the libraries receive free distributions, and then there are a number of persons who are unknown to us. They become regular subscribers or else write for copies and send the money later on, practically all the money comes in in the end.

Commodore Reinius (Sweden). — The Shipmasters' Boards are interested.

M. Albert (I. H. B., Secretary to the Committee). — Very few ask for the publications.

Commodore Reinius (Sweden). — They do not know them.

M. Albert (I. H. B., Secretary to the Committee). — This year the 'Compagnie Universelle du Canal de Suez' asked for three copies of all our publications.

Commodore Reinius (Sweden). — When I publish a new chart I can never sell many of them until some two or three years later. The Shipmasters' Board in my country is interested and the head thinks it would be excellent if we had more contact between the Bureau and similar organisations.

Captain Hooykaas (Netherlands). — Perhaps it would be desirable for the Bureau to issue circulars about publications and ask the Hydrographic Offices to send them to the people whom they think might be interested.

M. de Vanssay (France). — Need the Bureau send them through the Hydrographic Offices?

Captain Hooykaas (Netherlands). — The Bureau may not know where to send them and we may know it better.

Commodore Reinius (Sweden). — Of course it is of no use to publish information, we must have people to read what is published.

M. Albert (I. H. B., Secretary to the Committee). — It is very difficult to get a result by advertising unless you spend a lot of money and it is a question as to whether the sale of the Bureau's publications will ever be large enough to justify that.

Commodore Reinius (Sweden). — I think everything ought to be done to make the Bureau's publications as well known as they should be. What do you think?

M. Albert (J. H. B., Secretary to the Committee). — I have no opinion to express.

M. de Vanssay (France). — I wonder if many copies are left over?

M. Albert (I. H. B., Secretary to the Committee). — Of some publications, yes.

Commander Reinius (Sweden). — I only want to help the Bureau, and I will try to do more still in Sweden. I think very much can still be done in most countries.

The Chairman. — In Great Britain of course we have the *Nautical Magazine* which is a very big publication and goes throughout the mercantile marine, and, as regards the publications of the Bureau otherwise, Potter might advertise them in his catalogue, which is distributed throughout the world gratis. Do you think something after this style would do?

"The Committee is of opinion that a greater effort should be made to increase the number of sales and suggests as a commencement that the Bureau should circularise the Hydrographic Offices with a view to those Offices bringing these publications to the notice of the various organisations".

In other words; the Bureau should send circulars round and ask the various Hydrographic Offices to approach the people they think best suited with a view to the sales being increased. Is there any objection?

Captain Hooykaas (Netherlands). — Perhaps you could add "or other similar offices which may be interested".

The Chairman. — "And other similar institutions". It would then read as follows:

"The Committee is of opinion that a greater effort should be made to increase the number of sales, and suggests as a commencement that the Bureau should circularise the Hydrographic Offices and other similar institutions with a view to those offices bringing these publications to the notice of the various organisations".

Commander Reinius (Sweden). — The Hydrographic Offices should send to the Bureau lists of their different Organisations, libraries, *etc.*...

M. Albert (I. H. B., Secretary to the Committee). — May I say that this has already been done in the case of publications for free distribution. The Hydrographic Offices have been asked which institutions in their respective countries are interested in the publications.

M. de Vanssay (France). — There must be libraries which would like to have the publications of the Bureau.

M. Albert (I. H. B., Secretary to the Committee). — Many publications are sent to libraries.

M. de Vanssay (France). — Perhaps there has been too much free distribution.

The Chairman. — I was going to suggest whether we might not ask for the Free Distribution List by way of information. Perhaps M. Albert would produce it at the next meeting.

M. de Vanssay (France). — Perhaps extensive free distribution was necessary at first, but less necessary now that the Bureau is becoming better known.

M. Albert (I. H. B., Secretary to the Committee). — When you have started sending our publications gratis it is hard to stop.

The Chairman. — I do not think so.

INTEREST ON BANK DEPOSITS.

The Chairman. — Well, we will go on to Bank Deposits. The sterling, I understand, is at Barclay's. What interest?

M. Albert (I. H. B., Secretary to the Committee). — 3 per cent; the bank rate less 2 per cent.

Captain Hooykaas (Netherlands). — Why is that?

M. Albert (I. H. B., Secretary to the Committee). — In France when money is on deposit they discount it at the National Bank of the country, so that they can give the rate of that bank minus their profit, they discount it at the Bank of England (because it is in sterling) where they get 5 per cent interest, of which they give us 3 per cent and keep 2 per cent for themselves.

Captain Hooykaas (Netherlands). — Why not put it with the Bank of England ?

M. Albert (I. H. B., Secretary to the Committee). — Because it is not here. Also, I do not think the Bank of England would give us more. This is a Current Account. We can withdraw it at a moment's notice.

Captain Hooykaas (Netherlands). — That is hardly necessary.

M. de Vanssay (France). — Is it necessary that the money should be payable at sight ? Surely the whole need not be payable at sight.

The Chairman. — I wonder too whether it need be. Why should it be ?

M. Albert (I. H. B., Secretary to the Committee). — I suggested that once to the Committee, but they did not seem to agree.

The Chairman. — That of course is why you have such low interest. With six month's notice you might get 5 per cent.

Captain Hooykaas (Netherlands). — Perhaps now that the sum is so large it might be desirable to buy some stock. Why not ?

The Chairman. — You might buy War Loan or some other Trustee Stock.

Captain Hooykaas (Netherlands). — You get 5 per cent on Trustee Stock. In any case more than what you are now getting. And without speculation.

The Chairman. — Does the Bureau expect any sudden calls ?

M. Albert (I. H. B., Secretary to the Committee). — "We might put it on six months' call.

The Chairman. — Yes, keep a certain amount in the Current Account and put the other on deposit.

Captain Hooykaas (Netherlands). — I should suggest buying stock.

M. Albert (I. H. B., Secretary to the Committee). — But not to buy bonds or shares. Leave it in cash.

Commander Reinius (Sweden). — No speculating, of course.

Captain Hooykaas (Netherlands). — It should be possible now to put a certain amount in stock.

The Chairman. — I suggest this :

"The Committee is of opinion that the larger portion of the Bank deposits repayable at sight might with advantage be transferred to a Deposit Account or even invested in some Government Stock or other Trustee Security so as to increase the rate of interest payable".

(Agreed).

We will now adjourn.

Proceedings closed at 1130.

CHAPTER II.

The second Meeting of the Committee was held at 1100, on Tuesday 2nd November 1926.

The Chairman stated that the reports of the first meeting of the Committee which had taken place at 9.30 on Saturday, 30th October, were now ready and would be distributed to the Members.

The Committee agreed to the proposal of the Chairman that the next Meeting of the Finance Committee should be held at 9 o'clock, Wednesday morning, 3rd November.

The Chairman then turned to the "Report on the Financial Administration of the Bureau", and proceeded to deal with the various items under Current Expenditure.

PERSONNEL (Salaries).

The Chairman observed that the salaries were all known and fixed by the Statutes. A Sub-Committee had been appointed to consider the whole question of the salaries in connection with the "Proposals made", in which Admiral Phaff suggested that they should be reduced and Admiral Niblack made remarks on Admiral Phaff's proposals. The Chairman added that he did not think it necessary to touch on any controversial point with regard to salaries until after that Sub-Committee had reported.

The Committee agreed to this proposal.

PERSONNEL (Insurance).

The Committee agreed that the arrangements made with regard to insurance of the personnel attached to the Bureau appeared satisfactory.

PERSONNEL (Travelling Expenses).

The item of 7,000 Swiss Francs was noted as being the general sum allowed in this connection and the case was raised of the much larger amount allowed to the new Director owing to the considerable distance of his home from the Bureau: this applied also to the allowance for his change of residence.

M. Albert (I. H. B., Secretary to the Committee), in reply to a question raised as to whether the travelling expenses were on the same basis as the League of Nations, explained that the travelling expenses had been fixed at Committee Meeting at a round sum on the basis of the amount originally paid to the three Directors.

Captain Hooykaas (Netherlands) considered this a somewhat heavy sum.

The Chairman and Commodore Reinius (Sweden) agreed.

Commodore Reinius (Sweden) enquired whether the Directors actually received the 7,000 francs.

M. Albert (I. H. B., Secretary to the Committee) replied in the affirmative and explained that that sum had been agreed to the first time because the Directors had shown that it was their actual expenses. Admiral Niblack had written a letter to the Directing Committee saying that the amount was insufficient.

TRAVELLING EXPENSES (*Long Journeys*).

The Chairman considered the expenses in 1922, 1924 and 1925 were rather large and asked whether there had been any reports on these meetings in Geneva, Paris, Brussels, etc...

M. Albert (I. H. B., Secretary to the Committee) explained that he was somewhat at a loss to answer that question and suggested that the Committee should call the Director. He added that the President had always reported to the Directing Committee on the result of his visits.

Captain Hooykaas (Netherlands) observed that there were articles in the *Hydrographic Review* on the journeys to Brussels, The Hague and Paris: also Madrid and Lisbon. There had, however, been no article on the Cairo journey, as the President had fallen ill.

Commodore Reinius (Sweden) considered it a large sum for the visit to Cairo.

Captain Hooykaas (Netherlands) agreed that it was a heavy expense, but added that the Directors must know whether the visit was useful or not.

The Vice-Chairman considered only two things possible, either to examine whether the journey was necessary or to discuss the memorandum of expenses presented by the traveller afterwards.

Captain Hooykaas (Netherlands) proposed that the Committee should express their wish that there be no journeys more than are necessary in the future.

The Chairman pointed out that the Bureau was most peculiarly placed as the whole of the financial control was under their auspices. The Bureau could do exactly as it liked, as only once in five years was there any discussion on their methods. It was surely obvious to all that if any department of any particular country had the same amount of money, every expenditure and every sou of that sum would be most closely scrutinised. It therefore appeared to him that some sort of financial control should be instituted or a financial expert from the different countries should be attached to the Bureau to examine the accounts at periodic intervals on behalf of the various countries. That was just a rough idea as it appeared to him.

The Vice-Chairman enquired whether any such institution existed at the League of Nations.

M. Albert (I. H. B., Secretary to the Committee) thought that the League of Nations had some sort of organisation like this, that the Secretariat of the League of Nations prepared an Annual Budget which was voted by the General Assembly. The case was, however, different as the General Assembly voted at the same time the necessary contributions to cover the budget, whereas the contributions to the I. H. B. were fixed and the Bureau was obliged to remain within the limits of its contributions.

The Chairman agreed that the Bureau must remain within the limits of its contributions, but at the same time it was not necessary to spend up to the limits.

Captain Hooykaas (Netherlands) agreed. He considered it necessary that the Directors should know the opinion of the Committee as to how far they should go.

The Vice-Chairman pointed out that an audit was made each year.

M. Albert (I. H. B., Secretary to the Committee) pointed out, as a personal view, that the Bureau had always sent a financial statement giving all the expenditure during the year on all items, and had never received any comment from any of the States Members.

Mahmoud Bey Bayram (Egypt) considered that the States Members would not be likely to make any comment.

The Chairman suggested the following resolution :

" The Committee having examined the statement of payments under Sub-head 'Change of Residence Allowance' are unanimously of opinion that these are in excess of those allowed to officials taking up an appointment in similar circumstances, and consider that in future the payments should be as far as possible brought into line with the system followed by the League of Nations. They are further of opinion that visits of the Directors and personnel to Meetings and Conferences should only be undertaken with a quite definite object and on such occasions every effort should be made to keep expenses low ".

This resolution was adopted unanimously.

SHORT LOCAL JOURNEYS.

The Chairman considered that there was no need to remark on this, and that the only thing to consider carefully in the remainder of the report was the

RENT OF THE OFFICES.

The Chairman thought that the question of the removal to Malaga might be brought up later at the full session of the Conference, and it would depend largely on the rent of the Offices. Mr. Albert had already explained that the lease expired in October 1930 (i. e. in four years time) and he now asked M. Albert whether he could inform the Committee if there was any likelihood of the Bureau being able to renew the lease of the premises.

M. Albert (I. H. B., Secretary to the Committee) was unable to reply very well to that question as so much depended upon the economic position in France. If the franc recovered and were stabilised, matters would be very different from what they were at present, as a rule rents were very high here, which really balanced the fact that there was no income tax.

The Chairman and Captain Hooykaas (Netherlands) were of opinion that the rent was very reasonable, amounting to only about £ 140- a year.

M. Albert (I. H. B., Secretary to the Committee) explained that the rent was not so low when they took over the Offices, but that it was owing to the fall of the French franc.

The Chairman understood that it was the custom of the country to raise the rent automatically when a lease expired, that being so it was a question of what would happen at the end of four years. Was there anything they could suggest to the Directing Committee ?

M. Albert (I. H. B., Secretary to the Committee) suggested that the Bureau should buy some premises and thus be relieved of the necessity of paying rent at all.

The Chairman enquired whether in that case there would be any ground rent to pay.

M. Albert (I. H. B., Secretary to the Committee) replied that it would be a very small sum.

Mahmoud Bey Bayram (Egypt) considered that the Bureau would be obliged to pay the rent demanded or to leave the Offices.

The Chairman thought the Committee should indicate to the Directors what to do in such circumstances.

M. Albert (I. H. B., Secretary to the Committee) gave several examples of the rents paid by various Members of the Office for their private flats, showing that the Bureau was paying a very low rent for its premises.

Commodore Reinius (Sweden) enquired whether a price had been given for buying the offices.

M. Albert (I. H. B., Secretary to the Committee) replied that no offer had been made, in any case, the Bureau would not wish to buy its present premises as they were not very pleasant, being cold in the winter and hot in the summer.

Captain Hooykaas (Netherlands) thought it would be a good idea to build some offices specially.

The Chairman asked whether the figures were given in Swiss francs.

M. Albert (I. H. B., Secretary to the Committee) replied that he always converted the figures into Swiss francs in order to have one unit all through the book. The figure was 20,500 French francs per annum.

The Chairman suggested it should be left to the Directing Committee to consider the matter within the next four years and refer their proposals to the various Governments; during that time the franc might be stabilised and some thing definite might be known about the price; also the Bureau might be in a position to look around to see if there was any place more suitable.

The Committee adopted the proposal to leave to the Directing Committee within the next four years, when the lease falls in, to consider the future accommodation of the Bureau, with a view to the rental not being increased and the possibility of procuring other quarters more suitably placed without increase in cost, or buying or building premises outright.

The Vice-Chairman thought it might be advisable to express the wish that the Directors consider the possibility of buying a building.

This was adopted.

The Chairman then distributed the copies of the minutes of the first Meeting for the consideration of the Members, who were asked to remark on them at the sitting to be held on Wednesday morning, 3rd Nov., at 9 a.m. when it was hoped that the minutes of the second meeting would also be available.

The Meeting adjourned at 1145

CHAPTER III.

The third meeting of the Committee was held at 0900, on Wednesday, 31 November 1926.

The **Chairman** stated that at the first Meeting the Committee had asked to see the Distribution List of the documents of the Hydrographic Bureau and that this list was now before the Members.

M. Albert (I. H. B., Secretary to the Committee), explained that the list was divided into three parts: (1) Hydrographic Offices; (2) International Organisations; (3) Miscellaneous (various people interested in the work of the Bureau).

The **Vice-Chairman** expressed the opinion that the distribution was a little generous and asked whether all the people who received the *Hydrographic Review* gave their own publications in exchange.

M. Albert (I. H. B. Secretary to the Committee) said that very often in France they did not, and cited some examples.

The **Vice-Chairman** considered it unnecessary to send the *Hydrographic Review* if the Bureau received no publication in exchange.

The **Chairman** agreed that that was the principle to work on.

M. Albert (I. H. B., Secretary to the Committee) stated that the list was compiled in the beginning when it was necessary to have a somewhat extensive free list.

The **Chairman** proposed the following resolution, *which was adopted unanimously*:

"The Committee proposes that this Distribution List should be scrutinised by the various States Members, with a view to its being revised, and that in those cases where copies of the Bureau's publications are sent to the various editors of magazines and such like people, the Bureau should make it their duty to see that they obtain publications in return. The List should also be revised every year by the various States Members".

The **Chairman** and all the Members of the Committee passed the report of the First Meeting as being correct.

INSURANCES.

The **Chairman** pointed out that the insurance against theft and burglary had been discontinued, although the amount was very small, and asked whether any Member thought there was a necessity for this insurance.

M. Albert (I. H. B., Secretary to the Committee) explained that this item had been suppressed as the risk was practically nil; very little cash was kept in the Bureau and there was not much danger of the documents and publications of the Bureau being stolen. The Office Keeper lived at the Bureau.

The **Vice-Chairman** elucidated the fact that the Bureau was responsible for anybody carried in the lift if there was an accident.

Fire.

The **Chairman** enquired whether "Damage to Neighbours" referred to neighbouring houses.

M. Albert (I. H. B., Secretary to the Committee) explained that the classification was made according to the French law. The French law made a tenant responsible for the house and for the neighbours. The neighbours could claim if they were damaged by fire.

Third party risks.

Commodore Reinius (Sweden) enquired the meaning of this heading.

M. Albert (I. H. B., Secretary to the Committee) explained that it referred to the general responsibility which the Bureau had towards other people for any damage that might be caused to them by the staff in the course of work. As the amount was very small the Bureau had thought it best to be covered.

On the proposal of the **Chairman** the *Committee agreed unanimously that the insurance arrangements were satisfactory and that the insurance against theft and burglary was unnecessary.*

MAINTENANCE OF OFFICES — Light, Fuel and Water.

M. Albert (I. H. B., Secretary to the Committee) explained, in reply to a question from the **Chairman**, that there were only two people employed as office keeper and messenger, that the office keeper lived in and the messenger outside — these are the only two people with a uniform.

Captain Hooykaas (Netherlands) enquired whether the Bureau rented the whole building or only part of it.

M. Albert (I. H. B., Secretary to the Committee) answered that the Bureau had the whole of the Second Floor and about half of the Third Floor, also the Library downstairs, but not the First Floor.

Mahmoud Bey Bayram (Egypt) observed that the sums seemed quite reasonable but considered that some rule should be laid down for such expenditure, that in all administrations there was some rule for subordinate people beyond which they could not go.

Captain Hooykaas (Netherlands) considered that this could be left to the Directors.

M. Albert (I. H. B., Secretary to the Committee) explained that they had about two uniforms a year, one for winter and one or two suits of white clothes for summer.

Mahmoud Bey Bayram (Egypt) stated that a certain fixed sum was generally allowed for uniforms in Egypt, although they very often cost more.

The **Chairman** proposed that the Committee should state that it considered that the amounts disbursed under these two headings were not excessive, but that at the same time they consider that future expenditure should be kept within some average amount.

Captain Hooykaas (Netherlands) could not quite agree. He considered the Directors should be as free as possible.

M. Albert (I. H. B., Secretary to the Committee) pointed out that it was difficult to speak of an average, because, for instance, in 1923 the amount was double what it was in 1921. Besides if the lodging were enlarged by the necessities of the work of the Bureau, obviously the expenses of maintenance of the office would increase, also heating and lighting.

The Vice-Chairman did not consider that there could be any great excess of expenditure under this heading.

Commodore Reinius (Sweden), while liking rules, considered this too small a matter for a rule.

Mahmoud Bey Bayram (Egypt) said that he had been speaking of the lack of rule all through.

The Committee having considered the expenditure on the maintenance of office and light, fuel and water did not consider it excessive.

WORKING EXPENDITURE

Stationery and Printing.

M. Albert (I. H. B., Secretary to the Committee) explained that the printing mentioned here was not of publications but of office forms, etc...

The Chairman did not think this expenditure for office work at all unreasonable.

The Committee agreed.

Postage, Telegraph and Telephone.

The Chairman pointed out that expenditure under this head had been cut down considerably during the previous two years.

M. Albert (I. H. B., Secretary to the Committee) pointed out that the Bureau was quite unable to do anything in this matter even if the Committee did not consider it reasonable. It was cut down because the figures were in Swiss francs and the French franc had fallen.

Transport and Customs Duties.

The Chairman having read the text, understood that the Bureau had to pay on everything coming in.

M. Albert (I. H. B., Secretary to the Committee) said that the Bureau had to pay on everything they bought outside France that could have been bought in France.

The Chairman enquired whether, if he sent to the Office a parcel of books, duty would have to be paid.

M. Albert (I. H. B., Secretary to the Committee) replied that there would be practically no duty in such a case.

TRANSLATIONS, EXTRACTING, etc...

The Chairman understood that this expenditure was on account of persons who did not belong to the Bureau but who did occasional outside work for it.

M. Albert (I. H. B., Secretary to the Committee) agreed and gave the instance of some Russian documents which had been translated in this way. In reply to a question of other translations the Chairman was informed that any documents received from China and Japan were generally in English.

The Chairman referred to the expensive item "Calculation of Harmonic Constants" and the Committee passed the following resolution:

The Committee have no observations to make under this head. As regards the Calculation of Harmonic Constants, the Committee do not wish to express an opinion, but wish to leave it to the Committee on Tides.

MISCELLANEOUS EXPENDITURE.

Bank Charges and Insurance.

M. Albert (I. H. B., Secretary to the Committee) explained that the figures for the first two years were somewhat high but that the Bank was afterwards changed and the Bank charges came down.

The Vice-Chairman thought that the premium for Bank insurance might be reduced if a part of the capital of the Bureau was transferred into securities as had been suggested.

The Chairman suggested that this should be mentioned in the report to the Plenary Session.

The Committee agreed.

Entertainments and Visits - Minor Expenses.

The Committee had no remarks to make on these two items.

PUBLICATIONS ISSUED.

The Chairman suggested that the question of the issue of the publications had already been considered by the Committee and would undoubtedly be referred to a Plenary Session of the Conference, so that the question of expenditure on publications would then come up automatically.

The Committee wished to place on record their gratitude and thanks to the United States Hydrographic Office for their kindness in publishing, for the benefit of the States Members, sheets showing systems of buoyage, etc., and suggested that this expression of thanks should be endorsed by the Full Session.

Captain Hooykaas (Netherlands) considered that the printing of special publications should cease and that publications should be incorporated in the *Hydrographic Review*, which should be issued as occasion arose and not at a fixed time as at present. This would be less complicated.

M. Albert (I. H. B., Secretary to the Committee) pointed out that this would have to be brought before the Statutes Committee as under Article 46 (a) "The Bureau shall issue a periodical publication".

Mahmoud Bey Bayram (Egypt) pointed out that this article was discussed and passed at the Statutes Committee the previous day.

The Committee agreed with the proposal of Captain Hooykaas and also to refer this subject to the Statutes Committee with a view to the revision of Article 46 (a).

FURNITURE AND INSTRUMENTS.

The Committee have no remarks to make in this connection.

LIBRARY.

M. Albert (I. H. B., Secretary to the Committee) explained that the figures appearing referred only to the purchases of the Library, and did not include gifts.

Mahmoud Bey Bayram (Egypt) would have liked to see a little more money spent on books. He did not consider that there was much in the Library.

M. Albert (I. H. B., Secretary to the Committee) explained that the great majority of the books were given, and gave an instance of a French treatise on Hydrography which the Bureau had been quite prepared to buy, but which the Hydrographer of the French Navy had presented as a gift.

Commodore Reinius (Sweden) agreed with the Delegate for Egypt that

further expenditure should be made on the purchase of books to make a more representative Library of the work of the Bureau.

The **Vice-Chairman** quite agreed that the Library should be increased but, on the other hand, considered that there was no object in buying books systematically when they are not wanted.

M. Albert (I. H. B., Secretary to the Committee) explained in reply to a question of **Captain Hooykaas** that the Library of the Oceanographic Museum had books on all sorts of subjects which might be considered to be allied to Hydrography but very little on Hydrography proper.

Mahmoud Bey Bayram (Egypt) considered that the buying of books should be left to the discretion of the Directors, but when a good book came out they should try to obtain it as a gift; if that was impossible they should buy it.

M. Albert (I. H. B., Secretary to the Committee) explained that they had bought many books.

The **Chairman** suggested that the Committee resolve that the States Members should advise the International Hydrographic Bureau of any Hydrographic publications which might be of value to the Bureau, so that the Bureau could purchase them, or possibly obtain them gratuitously.

Commodore Reinius (Sweden) enquired whether the Bureau followed the publication of books except in special cases.

M. Albert (I. H. B., Secretary to the Committee) replied that the Bureau followed very closely the bibliography which appeared in the various magazines received and that a large bibliography was to be found in the Review. The Bureau was very well aware of what appeared, and when the Bureau considered it necessary, and the publication was not received free, it was bought.

The **Chairman** considered that if they adopted the resolution already suggested it would meet the case. It was hardly necessary, because there was a large expenditure in one direction, that there should also be a large expenditure in another.

Mahmoud Bey Bayram (Egypt) remarked that the idea was to have a suitable Library.

The Committee agreed to the resolution of the Chairman given above

DIFFERENCES ON EXCHANGE.

The Committee had no remarks to offer.

RECAPITULATORY STATEMENTS.

The **Chairman** remarked that the reserve seemed ample, and that as the question of excess of income over expenditure was being considered by a Sub-Committee of the Statutes Committee in connection with the proposals of Admiral Phaff and Admiral Niblack, it was unnecessary to discuss it at present. The Sub-Committee would if necessary discuss it with the Finance Committee.

Before concluding the Meetings the **Chairman** wished to inform Members that with reference to the control of the finance of the Bureau he had received a very interesting letter from Mr. Harada, of the League of Nations, who had been at the Conference giving evidence and advice on the work, and in that letter he pointed out how the financial administration of the Bureau may be effected, firstly on the lines of the League of Nations, and secondly on the lines which he (the Chairman) had suggested the previous day. He said that the Auditor of the League of Nations might be requested to draw up a separate report on the subject of expenditure quite apart from his report on the correctness of the expenditure. On the other hand he added that a Supervisory Committee

could be set up composed of two or three financial controllers of the respective Admiralties of the States concerned. They would not meet automatically but only in such cases as (1) if a State Member of the Bureau asked that they should do so, or (2) if the Auditor expressed the opinion that it would be well for them to meet.

He proposed, with the approval of the Committee, to hand this letter round for them to read, together with a book on the financial Administration of the League of Nations issued by the Financial Director, and then the remarks of the Committee could form an appendix to the résumé of their report for the consideration of the Plenary Session of the Conference to discuss and vote on.

The Committee agreed.

The Chairman proposed to get the approval of the Finance Committee to the whole of the minutes of all the Meetings of the Finance Committee, and then to make a résumé which would be handed round for the approval of members before submission to the Plenary Session.

It was arranged that the Finance Committee should meet at 0930, on Thursday, 4th November, to approve the minutes of the 2nd and 3rd Meeting.

The Meeting concluded at 1025.

RÉSUMÉ OF THE PROCEEDINGS OF THE "FINANCE COMMITTEE" MEETINGS.

The Committee appointed by the Members of the 2nd International Hydrographic Conference to enquire into the Finances of the Bureau held Meetings under the Chairmanship of Captain H. P. Douglas, C. M. G., A. d. C., R. N., on 30th October, 2nd November and 3rd November in the Oceanographic Museum Monaco.

The number of States Members who had reported that they wished to sit on this Committee was small in comparison with the numbers on other Committees, and the actual number who attended was not more than 5, including the Chairman. The Committee was greatly assisted in its work by Mr. Albert, Assistant Secretary to the International Hydrographic Bureau, and the Chairman wishes to put on record his personal appreciation of the great assistance rendered to him by Mr. Albert.

The resolutions passed and the proposals adopted by the Committee are set forth in the accompanying pages.

The Chairman wishes to draw attention to his remarks on the Financial Control of the income of the Bureau which will be found in the report of the 2nd Meeting of the Committee, p. 420, and to draw attention to the remarks of the expert from the League of Nations on this subject. These latter remarks will be found in the accompanying paper.

He is of opinion that the States Members should vote on the proposal whether they consider that some Financial Control is advisable and if so what form it should take.

(Signed) : H. P. DOUGLAS.

Chairman

November 1926.

Captain and Hydrographer of the British Navy.

RESOLUTIONS PROPOSED BY THE FINANCE COMMITTEE.

1st Meeting.

ARREARS OF CONTRIBUTION OF BELGIUM.

The Committee consider that the matter of the Belgian contribution should be referred to the League of Nations with a view to an attempt being made to recover the arrears. But at the same time they do not consider that any expense should be incurred by the Bureau in attempting to recover the money.

ESTIMATES.

The Committee have taken note of the explanations of the Estimates and approve the procedure which is being followed at present.

SALE OF PUBLICATIONS.

The Committee are of opinion that the publications should be priced nearer to their cost price.

The Committee are of opinion that a greater effort should be made to increase the number of sales, and suggest as a commencement that the Bureau should circularise the Hydrographic Offices and other similar institutions with a view to those Offices bringing these publications to the notice of the various organisations.

RATE OF INTEREST ON BANK DEPOSITS.

The Committee are of opinion that the larger portion of the Bank deposits repayable at sight might with advantage be transferred to a deposit account or even invested in some Government Stock or other Trustee Security so as to increase the rate of interest payable.

2nd Meeting.

INSURANCE OF THE PERSONNEL.

The Committee agree that the arrangements made with regard to insurance of the personnel attached to the Bureau appear satisfactory.

CHANGE OF RESIDENCE ALLOWANCE & TRAVELLING EXPENSES.

The Committee having examined the statement of payments under Sub-head "Change of Residence Allowance" are unanimously of opinion that these are in excess of those allowed to officials taking up an appointment in similar circumstances, and consider that in future the payment should be as far as possible brought into line with the system followed by the League of Nations. They are further of the opinion that visits of the Directors and Personnel to meetings and conferences should only be undertaken with a quite definite object connected with the work of the Bureau and on such occasions every effort should be made to keep expenses low.

FUTURE ACCOMMODATION AND RENT OF PREMISES.

The Committee adopts the proposal to leave to the Directing Committee within the next four years when the lease falls in to consider the future accommodation of the Bureau, with a view to the rental not being increased and the possibility of procuring other quarters more suitably placed without increase in cost, or of buying or building premises outright.

3rd Meeting.

FREE DISTRIBUTION LIST OF PUBLICATIONS.

The Committee propose that this Distribution List should be scrutinised by the various States Members, with a view to its being revised, and that in those cases where copies of the Bureau's publications are sent to the various editors of magazines and such like people, the Bureau should make it their duty to see they obtain publications in return. The list should also be revised every year by the various States Members.

INSURANCE OF FURNITURE AND BUILDING.

The Committee agree unanimously that the insurance arrangements are satisfactory and that the insurance against theft and burglary is unnecessary.

EXPENDITURE ON THE MAINTENANCE OF OFFICES.

The Committee having considered the expenditure on the maintenance of Office, and light, fuel and water, do not consider it excessive.

TRANSLATIONS, EXTRACTS, etc...

The Committee have no observations to make under the head "Translations, Extracts, etc.". As regards the Calculation of Harmonic Constants, the Committee do not wish to express an opinion, but wish to leave it to the Committee on Tides.

INSURANCE OF BANK BALANCES

The Vice-Chairman thought that the premium for Bank insurance might be reduced if a part of the capital of the Bureau were transferred into securities as had been suggested.

The Chairman suggested this should be mentioned in the report to the Full Session.

EXPENDITURE ON PUBLICATIONS.

The Committee wish to place on record their gratitude and thanks to the United States Hydrographic Office for their kindness in publishing, for the benefit of the States Members, sheets showing systems of buoyage, *etc.*, and suggest this expression of thanks be endorsed by the Full Session.

ENTERTAINMENTS AND VISITS.

The Committee have no remarks to make on the subject of entertainments and visits, and minor expenses.

FURNITURE AND INSTRUMENTS.

The Committee have no remarks to make on the subject of furniture and instruments.

PURCHASES FOR LIBRARY.

The Committee resolve that the States Members should advise the International Hydrographic Bureau of any Hydrographic publications which might be of value to the Bureau, so that the Bureau could purchase them, or possibly obtain them gratuitously.

DIFFERENCES ON EXCHANGE.

The Committee have no remarks to offer on the subject of differences on exchange.

MEMORANDUM ON THE FINANCIAL ADMINISTRATION OF THE INTERNATIONAL HYDROGRAPHIC BUREAU.

FINANCIAL CONTROL.

The financial control of any institution comprises the following three functions:

- 1) Scrutiny of the budget;
- 2) Control of economical expenditure of the funds;
- 3) Audit of the accounts.

As far as the financial administration of the International Hydrographic Bureau is concerned, the first and third functions of the control are performed respectively by the International Hydrographic Conference which draws up the budget every five years and by the official Auditor of the League of Nations who annually audits the accounts to see if they are correct.

But if it is considered necessary to make special arrangements for controlling the economical expenditure of the funds, the following might be suggested :

1) That the auditor should be requested to draw up a separate report on this subject, quite apart from his report on the correctness of the expenditure ;

2) That a " Supervisory Committee " should be set up, composed of, for instance, two or three financial controllers of the respective Admiralties of the States Members of the Hydrographic Bureau. This small Committee might thus be able to examine in greater detail the special report submitted by the auditor. However, in view of the fact that such a Committee will incur not a little expense vis-à-vis the limited budget of the Hydrographic Bureau, it should also be suggested, that the proposed Committee would not meet automatically, but only in the following cases :

- (a) if a State Member of the Bureau asked that it should do so, or
- (b) if the auditor expressed the opinion that it would be well for it to meet.

Our reasons for this suggestion are that, on the one hand, a Committee of 3 people coming from three different capitals is somewhat expensive but, on the other, the appointment of only a single controller does not give satisfaction to the majority of Members, and may also lead to great difficulties from the point of view of the Bureau itself. We believe that most Governments do not take into consideration the question whether the control machinery costs more than the amount it is likely to save, but it seems evident that the Hydrographic Bureau, with its limited budget, must consider this aspect of the question.

PART III.

C.

MEETINGS OF THE COMMITTEE ON WORK OF THE BUREAU

LIST OF MEMBERS OF THE COMMITTEE

CHAIRMAN : Captain H. P. DOUGLAS.

VICE-CHAIRMAN : Captain HERRERO Y GARCIA.

Baldi, Commander	-	-	-	-	-	Italy.
Butavand, Monsieur	-	-	-	-	-	Monaco.
Caballero y Lastres, Captain	-	-	-	-	-	Peru.
Croissandeau, Commander	-	-	-	-	-	France.
Crosley, Captain	-	-	-	-	-	United States.
Golemis, Lieutenant-Commander	-	-	-	-	-	Greece.
Hooykaas, Captain	-	-	-	-	-	Netherlands.
Lopes, Lieutenant-Commander	-	-	-	-	-	Portugal.
Milne-Henderson, Lieutenant-Commander	-	-	-	-	-	British India.
Monti, Lieutenant-Commander	-	-	-	-	-	Argentine.
Schweppe, Captain	-	-	-	-	-	Germany.
De Vanssay de Blavous, Ingénieur Hydrographe en Chef	-	-	-	-	-	France.

Secretary,

Lieutenant H. BENCKER.

REPORT ON THE WORK OF THE BUREAU :— Part I, D, page 361.

RESOLUTIONS PROPOSED BY THE COMMITTEE :— Page 364.

RESOLUTIONS ADOPTED BY THE CONFERENCE :— Part I, E, page 99.

CHAPTER I.

The first meeting of the Committee was held at 0930, on Thursday, 28th October, 1926.

The Committee received a communication from the German Delegate on the work of the Bureau relating to Paragraph II — Contours of Depths and XIV — Copper plate engraving for charts, which the Chair requested the International Hydrographic Bureau to have translated.

The Committee took note with satisfaction of the work done by the Bureau relating to the tasks with which the Bureau was entrusted by the London Conference.

A) *QUESTIONS REFERRED TO THE BUREAU BY THE LONDON CONFERENCE OF 1919.*

I. *Defined zones for Charts.*

The Committee considered that the work of the Bureau in this connection had been satisfactorily accomplished.

II. *Contours of Depth.*

The Committee was of opinion that the work of the Bureau on this question had not been clearly defined and decided that this question should be left to the decision of the Charts Committee.

III. *Common Abbreviations.*

The Committee decided in favour of the draft resolution, but also that the matter shall be referred to the Charts Committee for its information and concurrence.

IV. *Colouring of Light Sectors.*

The Chairman stated that the Bureau had studied this question and also made proposals to the effect that the colour of light sectors should be shown on charts when possible, as well as the limiting lines of the sectors and that in any case States should indicate the colour of light sectors. The above proposal was approved by all members. The Chairman therefore proposed that the Committee should report the work done by the Bureau as satisfactory.

(No observations).

V. *Transcription of Names.*

The Committee noted that, so far, very little information had been provided by the various States in answer to the request put forward by the Directing Committee, and thought that it would be of great value if the countries concerned would supply this information.

VI. *Compilation of Lists of Lights.*

The **Chairman** considered that the work done by the Bureau might be taken as satisfactory considering that the Bureau made suggestions for the adoption of tabular arrangements for Lists of Lights. Most States had sent in an answer. The Chairman therefore suggested that this question should be referred to the Committee dealing with Lists of Lights.

VII. *Visibility of Lights and the adoption of a formula.*

Captain Crosley (U. S. A.) considered that it was hardly possible to find an acceptable formula expressing the visibility of lights in view of the complexity of atmospheric conditions and the nature of the sources of lights used.

The **Chairman** also was of this opinion. He suggested that the work of the Bureau should be declared satisfactory and that the question should be referred to the Committee on Lists of Lights. He added that, considering the small chances of reaching satisfactory results, he did not consider it necessary to continue the discussion on this point.

It was decided to refer this question to the Committee dealing with the Lists of Lights.

VIII. *Limits of Oceans and Seas.*

The Committee decided not to examine the replies sent to the Bureau with reference to this subject but to refer the matter to the Charts Committee.

IX. *Distance Tables.*

The **Chairman** recalled that, in the opinion of the Bureau, this question could not be dealt with as it should be, so long as the question of limits of Oceans and Seas had not been fully settled.

Captain Crosley (U. S. A.) saw no connection between the two questions and did not share the opinion of the Bureau.

The **Chairman** supported this opinion and pointed out that Distance Tables were already in existence and that starting points had already been adopted.

Captain Crosley (U. S. A.) moved the following :—

“ In the opinion of the Committee the decision taken by the Bureau on this point, *i. e.* to wait for decisions on the Limits of Oceans and Seas, is not in accordance with what was desired.

“ To settle the question Hydrographic Offices should be advised to publish Distance Tables as soon as they think possible.”

The **Chairman** moved the following amendment :

“ The Committee considers therefore that, in order to solve this question, the various Hydrographic Offices should be advised to publish Distance Tables at their early convenience.”

In the opinion of the Chairman the question could be taken up again when the future work of the Bureau came under discussion.

The **Chairman** suggested that all decisions taken this morning should be drafted in both languages by the Secretariat and circulated to all the members of the Committee. A copy of these decisions would also be sent to the Chairmen of Committees to which questions had been referred, with a request that these questions be put on the Agenda of the respective Committees.

(Agreed).

The Committee then took up the question of

B) *RESEARCHES MADE BY THE BUREAU.*

The **Chairman** reminded the Committee that the Bureau when constituted was not expressly entrusted with these researches. All of them were fully explained in the Report and it might not be necessary to discuss every point since all States Members had been kept informed.

Captain Crosley (U. S. A.) made some interesting remarks on the *use of aircraft* by the United States Hydrographic Service.

On the proposal of the **Chairman** the following decision was adopted :

" The Committee takes note of the various researches and publications of the Bureau and intends to discuss them in detail when the question of work to be accomplished by the Bureau in the future comes under discussion."

As regards the *Visibility of Lights* :

Captain Hooykaas (Netherlands) thought that the Committee might express the wish that States Members should continue to provide information which the Bureau would publish.

Captain Crosley (U. S. A.) considered that everything concerning the study of *aids to navigation* was within the province of the Bureau, which was competent to take up their study. In his opinion the Committee could express a wish to this effect.

The **Chairman** thought that it would be better to wait until the discussion on future work of the Bureau began.

Captain Crosley (U. S. A.) accepted this suggestion.

C) *SUPPLEMENTARY REPORT ON WORK OF THE BUREAU.*

On the proposal of the **Chairman**, the Committee took note, with satisfaction, of the supplement on Work done by the Bureau.

D) *FUTURE WORK OF THE BUREAU.*

The **Chairman** proposed that the Committee should arrange a programme for discussion of the future work of the Bureau and that it should refer to the Chairmen of the various Committees matters which concerned them.

He then referred the Committee to the Statutes of 1923, pp. 5, 6, & 7, especially 5 & 6, and emphasized the original work which was entrusted to the Bureau. He also wished the Committee to consider carefully Article 7 in which the Bureau is stated to be a consultative body only. With regard to Article 9, the Committee should consider whether the Bureau should continue the publication of their documents on the lines along which they had already begun to proceed.

He suggested that the members of the Committee should think these matters over, in order to arrive at a decision on the general work of the Bureau on the next morning. He also reminded the Committee that the question of the visibility of lights and the adoption of a formula, which had been adjourned, would also have to be discussed at the next meeting.

Captain Crosley (U. S. A.) thought that the Bureau should no longer deal with this question.

M. de Vanssay (France) thought that although it was difficult to make it obligatory for the Bureau to seek a satisfactory formula in this scientific

question, the Bureau could not be forbidden to consider the possibility of studying the question.

The Chairman thought that that would be a matter for the Committee to consider and vote on, and the report of the Committee would then be sent to the Conference, which would decide: at present he was merely endeavouring to formulate a procedure.

Captain Crosley (U. S. A.) considered that the Conference could only make a recommendation.

On the proposal of the Chairman the discussion was deferred.

COMMUNICATION FROM THE GERMAN GOVERNMENT. (*)

The communication from the German Government was referred to Captain Schweppe, with a request that he make a brief résumé, in order that it might be decided whether it was necessary to include it in the report.

RECOMMENDATION OF THE CHINESE DELEGATION.

The Chinese Delegate, Commander Shao Chung, in connection with the discussion on the future work of the Bureau, requested that publications and circular letters for the more distant countries should be posted as early as possible by the Bureau, as, this time, he had received the Proposals Made just before his departure from China, which did not allow him sufficient time for preparation.

He added that this meant no criticism of the work of the Bureau. He knew that no delay was incurred within the Bureau, but hoped that due account would be taken of the special position of distant countries in this connection.

The Committee took note of this request and decided to lay it before the Conference for necessary action.

(The meeting adjourned at noon).

*) According to information supplied later by Captain Schweppe, this communication contained a description of a sounding apparatus, which description had been sent to the Bureau in accordance with Proposals VII, 2. It was not the idea of the German Delegation to have that apparatus discussed at the Conference. It was intended to give any Member of the Conference the possibility of informing himself on the apparatus.

This description will be found in *Hydrographic Review*, Vol. IV - No 2, November 1927.

CHAPTER II.

The second meeting of the Committee was held at 0930, on Friday, 29th October, 1926.

COMMITTEE MEETINGS.

The Chairman announced that, by an arrangement come to between Chairmen and Vice-Chairmen of the various Committees, in future the *Charts* Committee and *Finance* Committee would meet in the morning and the *Statutes* and *Work of the Bureau* Committees in the afternoon.

MINUTES OF PROCEEDINGS.

He then stated that the minutes of the proceedings of the Committee on the *Work of the Bureau*, which took place the day before (Thursday, October 28th) had been circulated to the Members of the Committee, and asked that any observations on those minutes should be communicated to him.

REPORT OF THE GERMAN DELEGATE.

The Chairman then referred to the résumé made by Commander Schweppe of the Report of the German Government and stated that he would have this Report translated and circulated.

REPORT ON THE WORK ACCOMPLISHED BY THE BUREAU.

The *Report on the Work accomplished by the Bureau* was distributed before the proceedings opened and no remarks were offered.

The Chairman proposed that the Committee should now consider the question whether the researches made by the Bureau, apart from the questions referred to it by the London Conference, were in the right direction, and suited the needs of the various countries.

The Committee agreed to ask Admiral Niblack to come and offer any remarks on the Report which he considered necessary.

Admiral Niblack, Director of the 3rd Section (Charts) of the Bureau, made the following report on the work accomplished by this Section :

"I refer you to the "Proposals and Statements of Director Niblack", as they appear in the Report. As I wish to refer to several of the points in the statement, I will briefly repeat them.

"In this statement I called attention to the fact that during the five years past there have been only two active Directors for four years and three active Directors for one year only. Therefore, the past work of the Bureau gives no indication of what the work of the Bureau might be in the next five years.

"The first question which I took up for my own satisfaction was the relation of the Bureau to the League of Nations. I have dealt with this in the last Hydrographic Review in an article on that subject. There are some 350 different international organisations and 12 under the League of Nations. Fortunately, only about six of them are interested in maritime matters. I found that the League of Nations was undertaking the examination of maritime questions with a view to making proposals in certain directions and that it was inclined to ask our Bureau for information. The work on the tabulation of port signals, coastal signals, buoyage and storm warning signals was chiefly undertaken with a view to getting together all information which should appear in the Sailing Directions and which the Hydrographers could use for new editions of Hydrographic works. The Bureau would secure the latest information and transmit it to the different Hydrographers. This work will be finished when this special work entitled "Summary of Data on Safety of

Life at Sea and Life Saving at Sea, together with the signals used in connection therewith," will have been published.

"There have been two or three chief results of this work: (1) Every international organisation dealing with maritime matters has at its disposal accurate information on which to act; (2) Hydrographers have in their possession all the data published by the different countries in the way of aids to navigation supplementary to the charts and other publications, which they themselves prepared from work in the field; (3) this has received recognition from the Mercantile Marine and the mariners themselves. The Nautical Magazine, a British publication of world-wide circulation, endorses in the most hearty way the bringing together of this information, with a view to having it laid before those authorities who can bring about important changes which will be helpful to the mariner.

"I want to say also that this has indirectly brought about considerable criticism of the Bureau as having given too much attention to one subject. The work of the Bureau has in no way been neglected thereby because in the section of which I have had charge (Section III). But in this connection, I do not know whether your attention has been called to the division of work in the Bureau. There are three Sections in the Bureau in accordance with the original proposal of Admiral Parry, which has been faithfully adhered to (see Annual Report of the Bureau for 1922). In accordance with this report, work has been done in (1) Practical Surveying (Admiral Parry, Director); (2) Problems in connection with Surveying (Admiral Phaff, Director); (3) Charts and Publications (of which I am Director). This third section has to deal with Charts and publications, Light lists, Buoy lists, and Notices to Mariners.

"Work is actively going on in the direction of compiling lists of symbols, original charts, and in preparing data for what I wish now to propose for future work of the Bureau: "Suggested Standard Type of Sailing Directions." That question I wish to take up with the Committee on Charts and Sailing Directions. The question of the work of the Bureau will naturally come under the Committee on Statutes if there is any amendment to be made to the present Statutes.

"With regard to the work of Section III, I have here all of the Circular Letters issued by the Bureau. There are, in this connection, since I entered the Bureau, only some two or three Circular Letters which have to do with other than work of Section III, other than routine letters which have carried on the general work of the Directing Committee. I might mention that some irritation has been caused among the Hydrographers at being asked so many questions and in the consideration of the future work of the Bureau, the Hydrographers themselves should recognise that our sources of information are the Hydrographic Offices and that the work is, in a sense, joint work. Further, most of the troublesome questions have been covered by the work already done here, and in future the Hydrographers will receive Circular Letters more in connection with the work to be adopted by this Conference as the future work of the Bureau.

"I consider that the provisions of Article 9, with regard to the work of the Bureau, call for a vast amount of work by three Directors in the next five years. It will probably not call to such a large extent for publications of the same character as in the last five years, but the work of the Bureau will constantly increase. I consider that the organisation of the Bureau as originally contemplated, five years ago, has gradually forced the Bureau to broaden the scope of its work, because the League of Nations and all the international organisations which have to do with maritime affairs now turn to the Bureau for advice or information for the particular Conference that they wish to call. It should be noted that the Bureau does not participate in any international Conferences with any desire to vote, and does not vote, but merely attends in

an advisory capacity. This work of furnishing information to international organisations has resulted, during the last year, in very substantial benefits to the mariners of the world. It does not in any way interfere with the proper functions of the Bureau or with its work unless it is considered that it is not the proper function of the Bureau to act in this manner. Personally I consider that, at the present moment, the standing of the Bureau has improved very materially in the world in general. Outside of whatever value it may be to individual Hydrographic Offices, which is, of course, the primary object of the Bureau, the secondary object of the Bureau, such as I have outlined is, in my opinion, a perfectly legitimate and desirable one, since it concerns itself only with those aids to navigation which make navigation safer and easier in all the seas of the world.

In conclusion I wish to say that Article 17, which provides "that the Bureau shall give a considered opinion on all questions dealing with its work which are referred to it by Conferences or by Scientific Institutions", covers practically the work here mentioned. We were requested recently to collect the more recent navigation tables which have appeared in scientific magazines outlining new methods of navigation. The Bureau decided that it was not within its province to do this kind of work and that it was not, in a sense, very much interested in questions of navigation proper. It is a question, however, which is of interest to some of the Hydrographic Offices, which do publish such information, and, in considering the future work of the Bureau, it might be considered whether the question of navigational methods should interest hydrographers enough to warrant the Bureau in making note in its bibliography, or otherwise, of improvements in methods of navigation.

I am ready to answer any question that may be asked and call attention to the question as to whether the division of the work of the Bureau into sections is satisfactory to the Committee.

The **Chairman** asked the Committee if there were any points that were not quite clear in Admiral Niblack's statement before it proceeded to discuss it.

Captain Hooykaas (Netherlands) asked whether any trace could be found of the correspondence which had taken place with the League of Nations.

Admiral Niblack replied that the correspondence with the League of Nations was all given in the Report on the work of the Bureau. The Bureau was not represented at the first meeting of the Technical Committee on Buoyage, but a Delegation of three members was sent to invite its co-operation, in order to avoid duplication, with the result that a Conference was called by the League of Nations in November 1925 at Monaco on the subject of Buoyage, Buoy Lighting, Coastal Lighting and Port and Coastal Signals of the World. All the data used at this Conference and subsequently were provided by the Bureau, the League of Nations having no Technical Staff for this purpose. There was no correspondence on the subject except in the reports of the meeting which would be issued to the Committee later. The Technical Committee modified very materially its opinion owing to data submitted to the Conference at Monaco and a subsequent Conference was called this summer at Stockholm, previous to which a small Committee met in Paris in May, in order to prepare the agenda of the Stockholm Conference. All data for this Conference were furnished by the Bureau, much of which was embodied in the report of the Conference and should have been in the hands of the members of this Committee. It was promised for October 1, by the League of Nations, but had not yet been received; it would probably come before the end of the Conference. The only correspondence with the League of Nations had been a request from the League to send a representative of the Bureau with data to attend its conference in an advisory capacity. The League of Nations paid all the expenses of this Conference and of the Delegate from the Bureau, with the exception of Mr. Bencker's expenses to Stockholm to assist the represen-

tative of the Bureau in the mass of detail. The League of Nations has announced its intention to call an International Maritime Conference in 1927, probably November. This intention originated with the League of Nations and only had relation to the work of the Bureau in that it was impossible for the League to consider any question relating to a Maritime Conference that had not been fully prepared by the Bureau, not only in connection with this forthcoming Conference, but also for any other International Conference dealing with maritime matters. The Bureau had therefore complied with the requirements of Article 17 of the Statutes.

Admiral Niblack further stated that the Chairman had received a report of the Conference held at Zurich on Maritime Meteorology, one of the 12 Sections of the International Meteorological Congress which met subsequently at Vienna; the Bureau's representative pointed out to the meteorologists assembled at Zurich that there were no definitions on the part of the meteorologists for nomenclature for force of the wind in language to correspond with the force of the wind in metres per second and miles per hour or, in other words, as in the original Beaufort scale. The meteorologists immediately remedied this matter and thanked him for calling attention to it. With regard to international storm warning signals, they adopted all the suggestions of the Bureau towards simplifying the existing system, with the result that a very much simpler system now stood a good chance of being adopted internationally for local storm warning signals.

The Chairman asked whether, in the opinion of the Committee, the work of Admiral Niblack should continue in its present form and stated that, in any event, the matter would have to be referred to the full Conference.

Captain Caballero y Lastres (Peru) was of opinion that the work done by Admiral Niblack was most interesting and should be continued.

Captain Herrero y Garcia (Spain) was also of opinion that Admiral Niblack's work was of great interest.

Captain Crosley (U. S. A.) proposed the following resolution:

"The Committee reports to the Conference that the work of the Bureau has been valuable and active and that as much has been accomplished as conditions made possible.

"The Committee recommends that the Conference put this information on record".

Captain Hooykaas (Netherlands) declared that this draft Resolution would anticipate the decision of the Committee regarding the future work of the Bureau. In fact if the Committee decided to request the Bureau not to continue its work on the lines which had been followed up till now, that should be mentioned in the Resolution relative to work already accomplished by the Bureau. For that reason he suggested that the Committee should not express an opinion on the work done before they had taken a decision on the future work.

In his opinion the question was not whether the work was useful or not but whether or not it came within the province of the Bureau.

The Chairman stated that he considered that the discussion on the work of the Bureau as regards the resolutions of the London Conference had been satisfactorily completed the previous day, but that, in connection with other publications made by the Bureau, the Committee only took note of the fact that these publications had been made.

Captain Crosley (U. S. A.) suggested that the Resolutions should be put in two parts: (1) approval or disapproval of what had been done: (2) recommendations as to what shall be done in the future. He considered that this would facilitate the discussions of the Conference.

The Chairman asked whether the Committee considered it possible to agree, without going through the Articles, that the work done was valuable: it had certainly been active, but it might be questioned whether it had been valuable for all countries.

Captain Crosley (U. S. A.) considered that the work had been exceedingly valuable for some people and useless for others, and therefore, if it was valuable to anybody, it was valuable.

Captain Hooykaas (Netherlands) was of opinion that the main question was not whether the work was useful or not, but rather whether or not it was within the proper sphere of action of the Bureau.

Captain Crosley (U. S. A.) added that his conception of a Hydrographic Office was that it was wholly and only for the benefit of mariners and that everything which concerned mariners in connection with charts and allied publications concerned a Hydrographic Office. He further considered that everything which concerned a Hydrographic Office should concern the International Hydrographic Bureau.

Captain Hooykaas (Netherlands) could not share the opinion of Captain Crosley because some Sections dealt with questions which had nothing to do with hydrography. It seemed fairly dangerous for the International Hydrographic Bureau not to keep to the objects mentioned in Article 6, clause (ii) of the Statutes which provided that the Bureau had as its object: "to co-ordinate the hydrographic work of these Services with a view to rendering navigation easier and safer in all the seas of the world." Admiral Niblack laid stress on the words: "with a view to rendering navigation easier and safer in all the seas of the world." Or course if those last words only were considered, the scope of the Bureau might be considerably widened, but if the work of the Bureau was to be kept within its real province, account should be taken of the first part of the paragraph which gave as the object of the Bureau: "to co-ordinate the hydrographic work of these Services" *i.e.* to deal only with hydrography.

It was because he was afraid that the International Hydrographic Bureau would overlap the work of other bodies that the Delegate of the Netherlands asked Admiral Niblack to furnish some information on the correspondence which passed between the Bureau and the Secretariat of the League of Nations.

The Chairman stated that, while not wishing to prolong the discussion, he was entirely in agreement with the Delegate for the Netherlands. He considered the question of port signals, international code of signals, *etc.*, as absolutely and entirely separate from Hydrography. In Great Britain, the Hydrographic Service would be unable to deal with these reports when it received them.

Captain Caballero y Lastres (Peru) wondered for what reason the London Conference referred the question of Lists of Lights to the Bureau.

Captain Crosley (U. S. A.) asked why buoys were put on charts if they were not included in Hydrography. He stated that by Hydrography depths were found,—that, if the depth were 10 fathoms, a buoy or light was not necessary, but if it were only one fathom, some mark or signal must be placed. He considered that everything put in Sailing Directions, or Light Lists, or any publication appertaining to the use of Charts, was Hydrography. If that were not so, why was there a Committee on Charts at present sitting?

Captain Hooykaas (Netherlands) pointed out that a great number of items could be quoted which were mentioned on and in nautical documents although they are not hydrography proper, *e. g.* coal prices.

Captain Crosley (U. S. A.) considered that the Delegate for the Netherlands had proved his (Captain Crosley's) argument, that the price of coal was Hydrography, otherwise it would not be considered. He thought it impossible to draw a line.

Captain Herrero y Garcia (Spain) remarked that all signals were connected with Hydrography.

The **Chairman** asked whether the Hydrographic Office was consulted in the United States when it was contemplated to alter either the place or the colour of buoys.

Captain Crosley (U. S. A.) answered in the affirmative but remarked that the decision did not come from the Hydrographic Office. Lights and buoys were under the Lighthouse Service, which had nothing in common with the Hydrographic Office from the administrative point of view, except for a certain amount of co-operation.

The **Chairman** pointed out that the International Hydrographic Bureau sent a Circular Letter to the various countries asking them to forward a list of their light-vessels and buoys and also more detailed information concerning cables for buoys, *etc.* In the opinion of the Chairman these questions were not of primary importance. It was not important that the Bureau should know how many light-vessels or buoys there were in the world, the main thing was that those light-vessels and buoys should be marked on the charts.

Captain Crosley (U. S. A.) pointed out that the question was asked by the League of Nations for some reason or other. If that inquiry had been undertaken on the initiative of the Bureau he would consider it a mistake.

Captain Hooykaas (Netherlands) thought that the inquiry would not be justified even if it was started by a question from the League of Nations, because the League was not competent to judge what was, or what was not, a hydrographic question, and what questions could therefore be answered by the Bureau or were outside its province.

Captain Crosley (U. S. A.) was fairly certain that the International Hydrographic Bureau was, after all, an offspring of the League of Nations and, therefore, under its authority. Under these conditions the League would be entirely justified in asking a question from the Bureau.

Captain Hooykaas (Netherlands) agreed that the League of Nations was justified in asking questions from the Bureau, but the work to be done by the Bureau should not be judged by these questions.

The **Chairman** answered that the International Hydrographic Bureau was merely affiliated to the League of Nations, but was neither under its control nor under its supervision.

Captain Crosley (U. S. A.) replied that if such were the case the information in the possession of the competent Department in his country was inaccurate.

The **Chairman** repeated that when the London Conference took place the International Hydrographic Bureau was quite independent from the League of Nations, but, on the other hand, Art. I, in the Statutes said that :

“ The International Hydrographic Bureau is an institution established by certain Maritime States and was taken under the direction of the League of Nations on 5th October, 1921.”

Commander Croissandeau (France) thought that the Bureau should avoid purely scientific questions and deal mostly with practical questions.

The **Chairman** asked whether the French Delegate thought that these Publications related to hydrographic questions.

Commander Croissandeau (France) replied that all those questions were dealt with by a special Section. If the International Hydrographic Bureau were in touch with the Hydrographic Service it should also get into touch

with the "Services des Ponts et Chaussées", which was responsible for that work.

In answer to the question from the **Chairman** as to whether the French Hydrographic Service dealt with buoyage from a practical point of view, Commander Croissandeau replied that the French Hydrographic Service only noted the position of buoys on the charts, but it is nevertheless represented in various nautical Committees, and the lights Committee, which deal with all questions relating to buoyage.

The **Chairman** stated that considering that the question whether buoys and buoyage should or should not come within the province of the Bureau had given rise to different opinions by members of the Committee, he suggested that this question should be left to the Plenary Session for decision.

Captain Crosley (U. S. A.) considered that the Committee should make a recommendation in accordance with the opinion of the majority. The Conference would then decide what had to be done. He therefore suggested that the Committee should forward two recommendations, one on the "Work done by the Bureau" and one on the "Future Work of the Bureau."

The **Chairman**, to be quite clear, explained that the question at present before the Committee was the following:— Is the work done by Admiral Niblack's Section on Signals, Buoyage, Port Signals, Coastal Signals, Storm Warning Signals, *etc.* considered of sufficient importance to justify a recommendation that it should be continued in future.

Captain Caballero y Lastres (Peru) considered that the question of signals was most important for navigation.

Captain Hooykaas (Netherlands) drew the attention of the Committee to the necessity of avoiding duplication of the work of other bodies, and also to the impossibility in which certain Hydrographic Services found themselves of doing anything in this connection: such was the case for Great Britain and the Netherlands. There was besides a certain danger in allowing the scope of the Bureau to become wider and wider. Admiral Niblack announced his intention of publishing a second edition of the International Code of Signals. That work might, no doubt, be very useful, but it did not come within the province of the Bureau. The Statutes limited this.

Captain Crosley (U. S. A.) remarked that when the United States Hydrographic office wanted information on buoys off the English coasts for instance, it did not send ships to get the information, but made use of information received from England. Indications given by charts in this respect were therefore not dependent on the organisation.

The **Chairman** wondered how many members of this Committee would be able to attend the 1927 International Conference on Buoyage: probably very few of them. Very likely, the only Hydrographer would be the representative of the International Hydrographic Bureau.

Captain Crosley (U. S. A.) thought that that representative should, therefore, be provided with all necessary information.

The **Chairman** added: "Or not go there at all."

Captain Caballero y Lastres (Peru) was of opinion that in this case the name of the Bureau should be altered to: "International Hydrographic & Navigation Bureau." He again remarked that according to clause (ii) of Art. 6 of the Statutes it was clear that the Bureau has as its object to "render navigation easier and safer in all the seas of the world." And one could not navigate without perfect signals, among which fog signals were of primary importance, particularly on the coasts of Peru. He, therefore, considered, that there was every reason for continuing the work begun by Admiral Niblack.

The Delegate for Peru added that Hydrographic Offices in America were not as important as European Offices and therefore could not face high expenses. For that reason they are glad to obtain information through the International Hydrographic Bureau.

The **Chairman** wished the Delegates to express their opinion clearly on the question as to whether this work should be continued.

The Delegates for **France, U. S. A., Spain and Peru** answered in the affirmative.

The Delegates of the **Netherlands and Great Britain** answered in the negative.

The **Chairman** stated that he would inform the Conference that, *in the opinion of the Committee, the publications mentioned in Admiral Niblack's Report were useful and should be continued.*

Captain Hooykaas (Netherlands) insisted that mention should be made that the decision was reached by a majority and also that the number of Delegations who voted against it should be shown.

The **Chairman** remarked that only six out of eighteen Members of the Committee were present and that the other Delegates might have observations to make.

Captain Caballero y Lastres (Peru) thought that it would be difficult for Delegates who did not take part in the discussion to express their opinion.

The **Chairman** pointed out that such Delegates would be able to read the Minutes.

In answer to a remark in which the Delegate for Peru pointed out that those Delegates would not be able to vote in any case, the **Chairman** said that the discussion might be reopened.

Captain Crosley (U. S. A.) to make matters quite clear, added that in his Draft Resolution he by no means intended to refer only to the work accomplished by Admiral Niblack's Section, but to all work done by the Bureau.

The Meeting adjourned for luncheon at 11 45.

FUTURE WORK OF THE BUREAU (Continued).

On resuming at 14.30, the **Chairman** gave a brief summary of the work already done by the Committee for the benefit of the members who had not been present at the previous meeting.

He then stated that some of the most important publications of the Bureau had been those dealing with the Analysis of Tides, the question of Harmonic Constants, and, recently, a publication on Tide-Predicting Machines in view of Harmonic Constants with Tables for Calculation of Tides by means of Harmonic Constants. He raised the question whether it was within the proper sphere of action of the Bureau to produce such publications. He spoke with diffidence, as, though Hydrographer, he did not profess to be a tidal expert.

Captain Crosley (U. S. A.) had heard that the work on tides had been severely criticised as being useless, although he considered that any work which was published and caused discussion was good. He, like the **Chairman**, felt his personal inability to judge this particular work although there were some employed in the United States Hydrographic Office who could. There were people in the United States and in the countries of the different Delegates capable of producing a publication of this kind although all of it would

perhaps not be right. He objected seriously to the Committee going on record as saying that a work of this sort should not have been published and that nothing of the kind should be done in the future.

The **Chairman** drew attention to the fact that the question did not concern what had been published already, but the future work of the Bureau. In other words, should the investigation of tides continue as already started, or should the Bureau simply collect data from various Hydrographic Offices and publish them?

Captain Crosley (U. S. A.) had understood the same thing. He had probably misled some Members by going into details about the criticisms which had been made, but in deciding whether or not the work should be continued, something must be known about its history. It was his belief that this particular publication had done good and therefore, if continued, would continue to do good.

Captain Hooykaas (Netherlands) thought that the study of hydrographic subjects was provided for in the Statutes, and, that, owing to its importance, this particular work should be continued.

The **Chairman** wished to know the opinion of the British tidal expert and the consensus of opinion of the various Hydrographic Services, including the Geodetic Service of the United States of America.

He then stated that **Admiral Phaff** had sent a message that he was at the disposal of the Committee to provide information concerning his work, but would consider it a great concession if, in that case, the Committee could call him at once, as he was not feeling well.

Captain Hooykaas (Netherlands) thought that it would be of no use to send for **Admiral Phaff** as the question would have to be referred to the Tides Committee.

The **Chairman** then sent a message to **Admiral Phaff** thanking him for his suggestion and stating that the Committee did not wish to trouble him.

Commander Warburg (Great Britain) thought the private publication of the opinions of different people on Tidal questions always useful as promoting discussion. The book "Tables for the Calculation of Harmonic Constants," he considered, however, to be on a different footing for, being a publication of the I. H. B., if there were a general consensus of opinion of tidal workers to declare this work worthless, the prestige of the Bureau would suffer. He also considered that a book produced for international use should be corrected whilst in proof form, instead of by errata and corrigenda as in this book. He drew attention to the fact that on the front page there was an important notice that "The kappa numbers are given in degrees (local or zone Time)", but the book gave no indication as to which time was used at any particular place, which was a very important point for the mariner. The opinion of **Admiral Phaff**, with whom he had had some correspondence on the matter, was that the predictions would automatically come out in whatever time was used at the place; that, however, he, (**Commander Warburg**) considered impossible. He found another serious objection in the fact that no values for mean sea-level were included in the book; it being useless for a seaman to know the height of the tide with reference to mean sea level if he did not know the height of mean sea level with reference to chart datum; he would have to search for this in documents (Charts, Sailing Directions, etc.) and perhaps be unable to find it.

In criticising this book he would draw attention to the fact that a number of uncorrected errors still existed, for instance, on p. 57, the constants for Woosung were given on line 2 and those for Shanghai on line 6, the authorities quoted being the *Journal of Geography*, Tokyo, and the U. S. Coast and Geodetic Survey, respectively; in actual fact these were the U. S. constants

for Woosung, and were given as for Woosung, not Shanghai, in the U. S. publication concerned. This was only one of a number of similar errors.

Captain Crosley (U. S. A.) on a point of order, considered that the Committee was convinced that there were errors in that book, but he thought it hardly the business of the Committee to continue the examination. If it was stated that the book contains errors, this would probably help in the printing in the future of a book that would be correct.

Commander Warburg (Great Britain) having considered the matter from a practical point of view turned to the theoretical side and read the following article from "Nature":

From Supplement to "Nature", 16-10-26.

International Hydrographic Bureau Special Publication No 12: Investigation of Harmonic Constants, Prediction of Tide and Current, and their Description by Means of these Constants. By Rear-Admiral Phaff. Pp. 80+6 plates. 5 Swiss francs. Supplement to Special Publication No 12. Tables for the Calculation of Tides by Means of Harmonic Constants. Pp. 136. (Monaco: International Hydrographic Bureau, 1926).

"The needs of the seaman are not adequately met by tide tables for a limited number of ports; he cannot always deduce from them the best times for attempting to enter other ports, especially where there is a large diurnal inequality in time and height of high water. The simplest solution of his problem is to compute by the harmonic method the tidal variation for a few hours of the required day. He should be provided with a list of the important constants for as many places as possible, with means to facilitate the computations together with rules which cannot easily be misunderstood. These recent publications of the International Hydrographic Bureau profess to meet his needs; it is regrettable that they appear to have been thrust upon the world with little consideration and with great haste, even if we only judge by the liberal errata and corrigenda pasted in each volume.

"The 'Tables' are for use with a method of computation based upon the work of Van der Stok; apart from an unsatisfactory method, the constants are not up-to-date, there is no value of mean sea-level and the phase-lags are given in degrees, local or zone time, without any indication as to which is used in any given case. The 'Tables' are not self-contained, lacking simple rules and typical forms for computation; the seaman, therefore, must first read the manual, and that will be fatal, for the language is frequently loose and obscure, and it is difficult to follow some of the process (p. 53), even for one capable of independent reproduction of the results. The author gives formulae and symbols without explanation (p. 59), and tables that are neither self-evident nor properly explained in the text (p. 57). In short, the manual appears to be transcribed from the author's notebook. It is incorrect to say that the constituents K_1 , K_2 can be reciprocally eliminated in one day, whereas 365 days are required to eliminate K_1 from S_2 ; also, that 55 days are required to give a negligible contribution from O_1 in the analysis for N_2 ; less than 55 hours would suffice for that purpose. The objects are indeed laudable, but it is to be regretted that these volumes are unworthy of international acceptance".

Commander Warburg, in conclusion, did not propose to continue a discussion of this matter as the technical side of the book would be criticised by the Tides Committee.

Captain Hooykaas (Netherlands) had understood that the matter would not be discussed in this Committee, otherwise he would have requested the presence of Admiral Phaff.

The **Chairman** had no intention of entering into a discussion on this point as it was a question for the tidal experts to decide. The question before the Committee was whether the future work of the Bureau should consist *inter alia* of tidal work. If so, the question of whether it should proceed on the lines already adopted would be referred to the Tides Committee.

The **Vice-Chairman** agreed that the latter question should be put to the Tides Committee.

The **Chairman** put it to the Committee whether or not it was their wish that the information as regards Tides should be published and researches made by the Bureau.

Captain Crosley (U. S. A.) proposed that the Committee recommend to the Conference that the Bureau in future do such tidal work as it may deem advisable. He considered Tides an important part of Hydrography.

This resolution was adopted.

Lt. Commander Monti (Argentina) was of opinion that the work done by the Bureau in connection with tides was most valuable. The Argentine Hydrographic Service had derived great benefits from the publications issued by the Bureau in this connection.

He did not think that the observations of the British Delegate were well-founded. Of course, the work in question was not perfect, but it was a very useful contribution to the study of tides.

The Committee agreed unanimously that the Bureau should continue its work on tides, but decided to refer the manner of conducting the work to the Tides Committee.

The **Chairman** expressed his satisfaction that the Committee had arrived at a decision about the study of Tides and considered that there would not be much more to say about the future work of the Bureau.

He wished, however, to refer to a point raised at the morning's meeting by the French Delegate with regard to echo sounding and to purely scientific researches and he now put it to the Committee that it was considered that any scientific work in connection with hydrographic instruments, chronometers, echo-sounding apparatus and all such allied instruments should form a part of the research work of the Bureau in the future.

The Committee agreed that this should form a part of the research work of the Bureau in the future.

The **Chairman** considered that the research work of the Bureau should also include gathering information for the various Hydrographic Offices as far as was in its power as regards the work of engraving, repairing chart plates and study of lithographic methods of reproduction. He suggested that the Bureau should cause enquiries to be made and report on the information obtained for the use of various nationalities who undertake the reproduction of charts.

No objection was raised and *this was approved.*

The **Chairman** stated that he had nothing further to say on the subject of the future work of the Bureau and asked if any other Members of the Committee had any suggestions to make.

Captain Hooykaas (Netherlands) wanted to correct a mistake he had made in one of his statements during the morning sitting of the Committee.

He had stated that the Bureau intended to publish a second edition of the International Signal Code. What he wanted to say was only that the Bureau intended publishing a supplement to that Code on Coastal Signals, Port Signals, *etc.*

In the second place, he quite agreed with Captain Crosley that the work of the Bureau and that of Admiral Niblack should not be mixed. It was only through his imperfect knowledge of English that he did not express himself quite clearly.

He added that the discussion which took place during the morning's sitting reinforced his impression that the Statutes should contain clear limits defining the work of the Bureau, as all discussion and misunderstandings seemed to arise from different interpretations of the word "hydrography". He proposed to put forward, before the Plenary Session, the urgent necessity that the limits of the work to be undertaken by the Bureau should be defined in the Statutes by a clear definition of the word "hydrography". This definition could be fixed either by discussion in full Conference, or, as somebody had suggested, by compiling a list of all subjects regarded by the various Hydrographers as appertaining to Hydrographic work, which list might help to define what the word "hydrography" actually implied.

Captain Crosley (U. S. A.) would very much regret if the Committee thought fit to interfere in any way with the work of the Bureau. If, for instance, they decided that the Bureau should not deal with new inventions, it would be prevented thereby from studying a new machine recently invented by the American Hydrographic Service for engraving charts. On the contrary, he hoped that there would be many such useful inventions in future, and that the Bureau would be able to study them.

Captain Hooykaas (Netherlands) shared the views of Captain Crosley. The definition of the word "hydrography" should be quite elastic.

The **Chairman** then asked the Delegate of the Netherlands whether he had the intention of putting forward a draft resolution before the Committee.

Captain Hooykaas (Netherlands) thought that the draft resolution might be found in the remarks he had made previously on the subject.

Captain Caballero y Lastres (Peru) pointed out that, although some currents had already been studied, none of those studies was complete, and many currents had not yet been studied at all.

The **Chairman** in answer to the Peruvian Delegate, reminded him that there was already a publication issued by the Bureau on "Prediction of Tides and Currents," moreover, another publication was being prepared which would be entitled "Current Metres."

Captain Caballero y Lastres (Peru) remarked that, for many currents, no information was available: it would therefore be advisable to ask the various shipping companies and Hydrographic Offices to study them.

To give an instance, the Humboldt current along the Peruvian coast flowed at certain periods at a speed of 24 miles and more in twenty-four hours in one direction, whereas on other days it flowed at a variable speed in the opposite direction coming from the Equator. Considering the high temperature of that Equatorial current a great quantity of fish must be killed by it at certain periods.

Captain Crosley (U. S. A.) thought that it would be very difficult for the Bureau to study currents.

Most of the time Circular Letters sent by the Bureau on this subject were left unanswered.

Speaking as the **British Representative**, the Chairman shared the opinion of Captain Crosley.

If the Bureau were to undertake such tasks it would have to increase the number of persons employed, which would mean higher expense. It would therefore be preferable that such questions be left for the Hydrographic Offices to study.

Captain Caballero y Lastres (Peru) never thought that the Bureau could undertake that study, but only that it would obtain the information from the Hydrographic Offices and centralise it. A recommendation to the Offices of various countries would encourage the study of that problem.

In answer to a question from the **Chairman** as to what form the queries should take and what information should be supplied, the Delegate for Peru explained that the Bureau should recommend to the National Offices the study of currents and, particularly, that they ask for information from the various Shipping Companies. The International Hydrographic Bureau would then draw conclusions from the information received.

M. de Vanssay (France) asked whether a wish had not already been expressed concerning the advisability of drawing up a list of geographical positions.

Captain Crosley (U. S. A.) suggested that the Committee should mention in its report the question of currents and add that, in the opinion of the Committee, the question should deserve the attention of the Hydrographic Bureau.

The **Chairman** accepted the suggestion, but considered that the Committee should go further.

M. de Vanssay (France) noted that the Bureau was not qualified to gather information direct from mariners of various countries, but could only receive information from the national Hydrographic Offices.

Captain Caballero y Lastres (Peru) quite agreed on this point with the French Delegate.

The **Chairman** stated that the Committee, having now considered both "Work accomplished" and "Work to be done" by the Bureau, has finished its work.

Captain Crosley (U. S. A.) asked whether the Committee would send in to the Plenary Session a report embodying the decisions taken.

The **Chairman** replied that he expected to draft, with the Vice-Chairman and with the help of the Minutes, a report which would be forwarded to the Plenary Session.

The above proposal was accepted and the Meeting closed at 1600.

REPORT OF THE "COMMITTEE ON WORK OF THE BUREAU"
forwarded for the information of the President of the Conference.

Meetings were held during the forenoon of 28th. October and 29th. October in the Conference Hall, Oceanographical Museum, and during the afternoon of the 29th. October in the International Hydrographic Bureau's Offices, under the Chairmanship of Capt. H. P. DOUGLAS, C.M.G., A.d.C., R.N., Senior British Delegate.

Detailed reports of each Meeting have been referred to all Members of the Committee including those who were unable to be present, and they having all endorsed the resolutions and approved of the remarks, the following résumé is referred for confirmation by the Full Conference.

The Committee first took account of the work which had been entrusted to the Bureau by the London Conference of 1919, and unanimously agreed that :—

"Satisfactory progress had been made generally, in endeavouring to complete the work entrusted to them, but the Committee are of opinion that of the work detailed, further investigations are necessary before their task can be said to be accomplished."

In this connection "II—Contours of Depth", "III—Common abbreviations", were referred to the Committee on Charts, and "VI—Compilation of List of Lights and" "VII—Visibility of Lights and the Adoption of a Formula" to the Documents Committee, whilst it was decided that the Bureau should endeavour to obtain and publish the information required under "V—Transcription of Names". As regards "IX—Distance Tables" the Bureau should not have waited for the decision on the limits of Oceans and Seas, it being generally considered that the latter has no connection with the subject.

It is to be noted that in the "Report on Work of the Bureau" Part I, para. *iv.*, Colour of Light Sectors, it is stated by the Bureau that the proposal was approved by all members *except Portugal*.

The Chairman of the Committee on Work of the Bureau is, however, informed by the Delegate for Portugal that this proposal has been approved by that State and that the Bureau's statement should therefore be amended accordingly.

The Committee then undertook an examination of the publications of the Bureau as given in the report, and after general remarks by various members of the Committee, the following conclusion was formulated. "The Committee takes note of the various researches and publications of the Bureau and intends to discuss them in detail when the question of the work to be accomplished by the Bureau in future comes under discussion."

FUTURE WORK OF THE BUREAU.

It was apparent that the Committee were not unanimous that the work done by the Bureau, apart from that explicitly entrusted to them by the London Conference of 1919, was in the right direction, and that the researches undertaken by the Bureau suited the requirements of the various States;

moreover, in the opinion of some of the States Members a departure had been made from the hitherto accepted definition of hydrographic subjects. The Committee had the advantage of hearing a statement by Rear-Admiral NIBLACK, Director, in which he contended that subjects such as Port Signals, Coastal Signals, Buoyage, Storm Warning Signals, Lifesaving Stations, Safety of Life at Sea, and the International Code of Signals, were so interwoven with hydrography that the International Hydrographic Bureau should continue this work to which he had wholeheartedly devoted himself since his appointment as Director. It also transpired during the conversations that the League of Nations were relying on the Bureau to help them in their investigations on these subjects. After further discussion it was evident to the Chairman that, whilst some States-Members wished to extend the functions of the Bureau to include, in his opinion, purely Navigational subjects, as against the original conception of the organisation, *viz*, hydrographical subjects, this was due to the fact that some of the smaller nations do not discriminate between the two. Voting then took place and it was particularly requested that mention should be made that a decision was reached by the majority and that the names of delegations who voted should be recorded. The question for vote was "Should this work of the Bureau, *i.e.* that dealing with Navigational matters, be continued as future work of the Bureau?". 6 Members of the Committee, including the Chairman, out of a total of sixteen were present and of the 6 the Delegates for FRANCE, PERU, SPAIN, and U.S.A. voted in favour of continuing the work, whilst the Delegates for GREAT-BRITAIN and the NETHERLANDS voted against.

It was particularly noted that in all probability other members of the Committee, had they been able to be present, would have voted, and therefore the Chairman is strongly of opinion that a further vote, after discussion, should be taken at a full session of the Conference.

The NETHERLANDS Delegate is of opinion, and the Delegate for Great BRITAIN is in agreement, that the reasons against the continuation of work on subjects other than purely hydrographical ones are:—

- (1) Considerable waste of time and money.
 - (2) The impossibility of most Hydrographic Offices to do anything in the matter, and
 - (3) The danger of trespassing on the work of other organisations.
- and the wish was therefore expressed that it should be explicitly laid down in the statutes what the work of the Bureau for the future is to be.

Other future work for the Bureau was then considered, and discussion took place with special reference to the publications dealing with Tidal matters which have been published by the Bureau. It was obvious that these expensive and voluminous publications had not been received with general approval by the various States and it was also obvious that the alleged mistakes and mis-statements in these publications could not be discussed by this Committee, the subject being outside their terms of reference. It was therefore approved generally that, whilst publication of tidal research work should be continued by the Bureau, the lines on which the work be undertaken should be referred to the Tidal Committee. The Committee noted with regret the sudden indisposition of Admiral PHAFF, which prevented his attendance, thus depriving the Committee of his valuable remarks.

The Committee then unanimously agreed that the future work of the Bureau should include investigation into Echo Sounding, Evolution of new hydrographic instruments, chronometers, and all other instruments in connection with actual hydrographic surveying, and so far as was in their power, the

work of chart reproduction should be thoroughly investigated in all its branches, and information so obtained on all these promulgated forthwith for the information of the various States Members.

Regarding the study of Oceanic Currents which was suggested by the Delegate for PERU, it was generally agreed that such study should be left to the various Hydrographic Offices who were at present actively pursuing these investigations; for it was considered that such an investigation by the Bureau was beyond the capabilities of the staff.

The Committee particularly wishes to draw the attention of the full Conference to a request by the Delegate for CHINA, which was submitted at the first meeting of the "Committee on Work of the Bureau", viz. "In connection with the discussion on the future work of the Bureau, it is proposed that publications and circular-letters for the more distant countries should be posted as early as possible by the Bureau, as on this occasion he had received the "Proposals Made" only just before his departure from China, which did not allow him sufficient time for preparation."

The Chairman, whilst recognising the fact that this request may be considered to be outside the terms of reference of his Committee, begs to support the Chinese Delegates in this request, which, it was decided by the Committee, should be laid before the full Conference for the necessary action.

(Signed) : H. P. DOUGLAS,

*Captain, Royal Navy,
& Hydrographer of the British Navy
Chairman.*

RESOLUTIONS PROPOSED BY THE COMMITTEE ON WORK OF THE BUREAU

A) *QUESTIONS REFERRED TO THE BUREAU BY THE LONDON CONFERENCE 1919.*

The Committee first took account of the work which had been entrusted to the Bureau by the London Conference of 1919, and unanimously agreed that...

"Satisfactory progress had been made generally, in endeavouring to complete the work entrusted to them, but the Committee are of opinion that of the work detailed, further investigations are necessary before their task can be said to be accomplished".

I. *Defined zones for Charts.*

The Committee considered that the work of the Bureau in this connection had been satisfactorily accomplished.

II. *Contours of depth.*

The Committee was of opinion that the work of the Bureau on this question had not been clearly defined and decided that this question should be left to the decision of the Charts Committee.

III. *Common Abbreviations.*

The Committee decided in favour of the draft resolution by the Bureau, but also that the matter shall be referred to the Charts Committee for its information and concurrence.

IV. *Colouring of light sectors.*

The Committee reported the work done by the Bureau to be satisfactory.

V. *Transcription of Geographical Names.*

The Committee noted that, so far, very little information had been provided by the various States in answer to the request put forward by the Directing Committee, and thought that it would be of great value if the countries concerned would supply this information. It was decided that the Bureau should endeavour to obtain and publish the information required under "V— Transcription of Names".

VI. *Compilation of Lists of Lights.*

The Committee considered that the work done by the Bureau might be taken as satisfactory and referred this question to the Committee dealing with Lists of Lights.

VII. *Visibility of Lights and the adoption of a formula.*

The Committee decided to *refer this question to the Committee* dealing with the *Lists of Lights*.

VIII. *Limits of Oceans and Seas.*

The Committee considered that the work of the Bureau in this connection had been done in a satisfactory manner. It decided, however, not to examine the replies sent to the Bureau with reference to this subject but *to refer the matter to the Charts Committee*.

IX. *Distance Tables.*

As regards "IX— Distance Tables," the Bureau should not have waited for the decision on the Limits of Oceans and Seas, it being generally considered that the latter has no connection with the subject.

Distance Tables were already in existence and starting points had already been adopted.

The Committee considers therefore that, in order to solve this question, the various Hydrographic Offices should be advised to publish Distance Tables at their early convenience.

B) *RESEARCHES MADE BY THE BUREAU.*

The Committee takes note of the various researches and publications of the Bureau and intends to discuss them in detail when the question of the Work to be accomplished by the Bureau in future comes under discussion.

X. *Use of Aircraft for surveying.*

(Dealt with in Plenary Session).

XI. *Harmonic Analysis of Tides.*

The Committee approved generally that, whilst publication of Tidal research work should be continued by the Bureau, the lines on which the work be undertaken should be *referred to the Tidal Committee*.

(for further details see Report of the Committee on Work of the Bureau).

XII. *Progress of Hydrography.*

(Dealt with in Plenary Session).

XIII. *Manual of Symbols and Abbreviations of all Nations.*

(Dealt with by the Committee on Charts).

XIV. *Copper Plates for Charts, Engraving and Repairs.*

XV. *Reproduction of Charts.*

The Committee considered that the research work of the Bureau was to gather information for the various Hydrographic Offices as far as was in its power as regards the work of engraving, repairing chart plates, and study of lithographic methods of reproduction. It is suggested that the Bureau should thoroughly investigate these branches and should cause enquiries to be made in different countries, and report on the information obtained for the use of various States Members who undertake the reproduction of charts.

XVI. *Symbols: Leader Cables — Submerged wrecks — Wireless and Radiogoniometry.*

(For details see "Resolutions of Committee on Charts").

XVII. *Sounding by Sweeping*

XVIII. *Echo sounding.*

The Committee unanimously agreed that the future work of the Bureau should include investigation into Echo Sounding.

(See also *Plenary Session*).

XIX. *Original Charts.*

(Dealt with by *Committee on Charts*).

XX. *Disturbance of the Surface of the Sea.*

(Not discussed).

XXI. *Terminology for Submarine Relief.*

(Not discussed).

XXII. *Notices to Mariners.*

(For details, see *Resolutions of Committee on Charts & Documents*).

XXIV. *Distinguishing Signal for surveying vessels.*

(Dealt with by *Plenary Session*).

XXIII. *Signals in general.*

XXV. *Buoyage.*

XXVI. *Port Signals.*

XXVII. *Coastal Signals.*

XXVIII. a) *Wind Force and Beaufort Scale*

b) *Storm Warning Signals.*

(Details not discussed)

XXIX. *Life Saving Stations.*

XXX. *International Code of Signals.*

The Committee voted on the question: "Should this work of the Bureau, i.e. that dealing with Navigational matters, be continued as future work of the Bureau"? Voting then took place and it was particularly requested that mention should be made that a decision was reached by the majority and that the names of Delegations who voted should be recorded. 6 Members of the Committee, including the Chairman, out of a total of 16, were present, and of the 6 the Delegates for FRANCE, PERU, SPAIN and U. S. A. voted in favour of continuing the work, whilst the Delegates for GREAT-BRITAIN and NETHERLANDS voted against, and the wish was expressed that it should be explicitly laid down in the Statutes what the work of the Bureau for the future is to be. (see *Report of the Committee on Work of the Bureau*, above).

C) *SUPPLEMENTARY REPORT ON WORK OF THE BUREAU.*

The Committee took note, with satisfaction of the supplement on Work done by the Bureau.

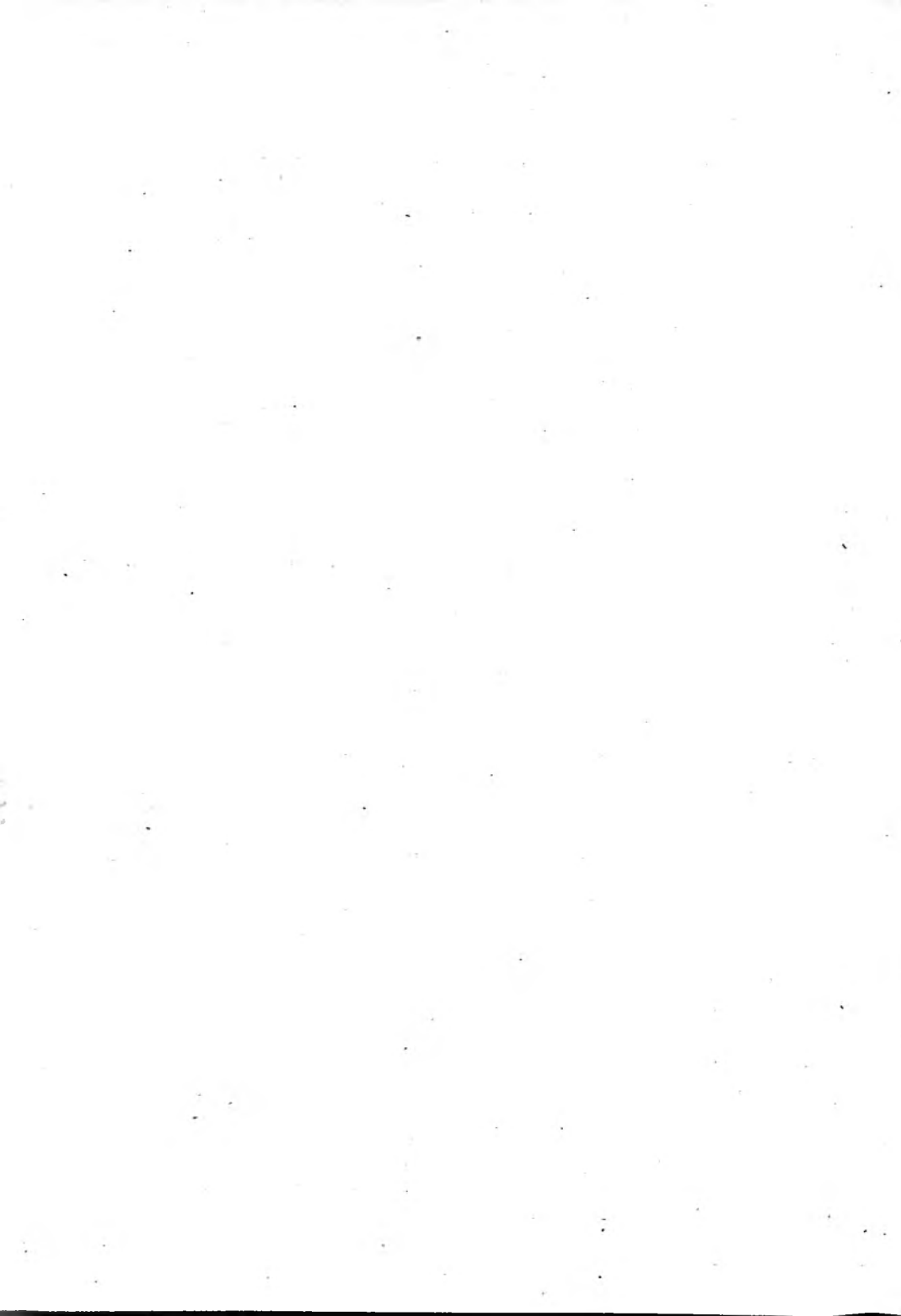
D) (*EXTRA*).

Instruments.

The Committee agreed that any scientific work in connection with evolution of new hydrographic instruments, chronometers, echo-sounding apparatus and all other instruments in connection with actual hydrographic surveying should form a part of the research work of the Bureau in the future. So far as was in its power, information so obtained should be promulgated forthwith for the information of the States Members.

Study of Oceanic Currents.

Regarding the study of Oceanic Currents, which was suggested by the Delegate for PERU, it was generally agreed that such study should be left to the various Hydrographic Offices who were at present actively pursuing these investigations; for it was considered that such investigation by the Bureau was beyond the capacities of the Staff.



PART III.

D.

MEETINGS OF THE COMMITTEE ON CHARTS & TECHNICAL DOCUMENTS.

LIST OF MEMBERS OF THE COMMITTEE :

Chairman : Commander C. BALDI.

Vice-Chairman : Commadore G. P. REINIUS.

Benitez, Commander	-	-	-	-	-	Spain.
Bjørset, Captain	-	-	-	-	-	Norway.
Bouveng, Commander	-	-	-	-	-	Sweden.
Butavand, Monsieur	-	-	-	-	-	Monaco.
Chen, Lieutenant-Commander	-	-	-	-	-	China.
Croissandeau, Commander	-	-	-	-	-	France.
Douglas, Captain	-	-	-	-	-	Great Britain.
Fablet, Captain	-	-	-	-	-	Argentina.
Golemis, Lieutenant-Commander	-	-	-	-	-	Greece.
Haselfoot, Commander	-	-	-	-	-	Great Britain.
Hori, Captain	-	-	-	-	-	Japan.
Kawamura, Captain	-	-	-	-	-	Japan.
Lopes, Lieutenant Commander	-	-	-	-	-	Portugal.
Luymes, Captain	-	-	-	-	-	Netherlands.
Milne-Henderson, Lieutenant-Commander	-	-	-	-	-	British India.
Monti, Lieutenant-Commander	-	-	-	-	-	Argentina.
Ravn H. O., Captain	-	-	-	-	-	Denmark.
Rasikotsikas Commander	-	-	-	-	-	Greece.
Richards, Esq.	-	-	-	-	-	Egypt.
Shao-Chung, Commander	-	-	-	-	-	China.
de Vanssay de Blavous, Ingénieur Hydrographe en Chef	-	-	-	-	-	France.
Zacharias, Chief Hydrographic Surveyor	-	-	-	-	-	Germany.

Secretary,
Commander C. DENISON. (I. H. B.)

RESOLUTIONS PROPOSED BY THE COMMITTEE : Page 463.
These are reproduced in Part I, E, page 101.

The Charts Committee was divided into two Sub-Committees.

Sub-Committee "D1" (CHARTS)

Benitez, Commander	-	-	-	-	-	Spain.
Golemis, Lieutenant-Commander	-	-	-	-	-	Greece.
Haselfoot, Commander	-	-	-	-	-	Great Britain.
Hori, Captain	-	-	-	-	-	Japan.
Kawamura, Captain	-	-	-	-	-	Japan.
Lopes, Lieutenant-Commander	-	-	-	-	-	Portugal.
Luymes, Captain	-	-	-	-	-	Netherlands.
Shao-Chung, Commander	-	-	-	-	-	China.
Reinius, Commadore	-	-	-	-	-	Sweden.
Richards, Esq.	-	-	-	-	-	Egypt.
de Vanssay de Blavous, Ingénieur Hydrographe en Chef	-	-	-	-	-	France.
Zacharias, Chief Hydrographic Surveyor	-	-	-	-	-	Germany.

Sub-Committee "D2" (OTHER MATTERS)

Baldi, Commander	-	-	-	-	-	Italy.
Bouveng, Commander	-	-	-	-	-	Sweden.
Chen, Lieutenant-Commander	-	-	-	-	-	China.
Croissandeau, Commander	-	-	-	-	-	France.
Milne-Henderson, Lieutenant-Commander	-	-	-	-	-	British India.
Ravn H. O., Captain	-	-	-	-	-	Denmark.
Rasikotsicas, Commander	-	-	-	-	-	Greece.

CHAPTER I.

The first meeting of the Charts and Documents Committee was held at 0945 on Thursday, 28th October 1926, Commander Baldi in the Chair.

The **Chairman** having declared the meeting open, proposed that the Committee should be divided into two sub-committees as follows, "*D₁*" on Charts, and "*D₂*" on Other Matters.

This proposal was adopted and the two sub-committees were composed as will be seen on previous page.

It was decided that the sub-committees should meet alternately until further notice.

Members of the Committee might attend meetings of both sub-committees if they so desired.

Captain Hori (Japan) pointed out a mistake on page 15 of "Proposals made". In the table, a note of interrogation appeared in the third column against the name of Japan. This should read "Yes".

The **Chairman** then adjourned the meeting.

CHAPTER II.

The second meeting of Committee "D" was held at 0945 on Friday, 29th October 1926, Commander C. Baldi in the Chair.

Captain Hori (Japan) requested a correction of the previous day's proceedings. The English translation of his remarks, as quoted on page 3 should read as follows :

" On page 15, the Table giving the replies of States should give, as Japan's reply, *Yes* in each of the four columns, instead of : *Yes, Yes, ?, No.* "

ANNOUNCEMENT FROM THE CHAIR.

The Chairman said that according to the desire expressed by many Members to participate in the discussions of the various Committees, it was not possible to maintain the decision taken yesterday to subdivide the Committee into two sub-Committees.

He then said that the Meeting of the Chairman of Committees had just decided that the Finance Committee and the Charts Committee would meet in future only in the morning, and the other committees in the afternoon.

M. de Vanssay (France) considered that there was no objection to the Committee remaining divided into two sub-Committees, on condition that they meet alternately.

The Chairman observed that the reason for which it had been decided that the Committee should be subdivided, was simply to save time, by sitting simultaneously.

M. de Vanssay (France) requested that the two sub-Committees should be maintained, as had been decided.

The Chairman replied that there was no longer any advantage in having two sub-Committees, as it was no longer possible to have two sittings at the same time.

M. de Vanssay (France) insisted that the sub-Committee on Charts should be maintained as it was.

The Chairman replied that it should be so.

He then said that, for voting, the names of the Delegations would be called out, and requested them to answer in a loud voice.

M. de Vanssay (France) wondered whether this procedure was in conformity with the Statutes. In fact, it seemed to him that even those Members who had been invited had a right to vote.

The Chairman replied by reading out Article 57 (a) of the Statutes :

" Each Member has one vote only on all questions submitted to Conferences ; the only exceptions to this are those which are laid down in Article 59 (v) and (x) ".

M. de Vanssay (France) did not insist.

CHARTS.

The Chairman opened the discussion on Section I :

SYMBOLS. — A) NATIONAL LIST OF SIGNS AND ABBREVIATIONS.

Sweden proposes that :

" the list of signs and abbreviations of each nation, using a language other than English, should be translated into English in order that it may be

read and understood by mariners of any nationality, the English language being the only one with which mariners of all nations are generally more or less acquainted."

He then produced for examination a compilation of the signs with their meaning in twelve languages.

Commodore Reinius (Sweden) observed that such a list of signs and abbreviations made out in twelve languages would certainly be a big and expensive volume, very difficult to keep up to date, and which most merchant ships would be unable to use.

He then suggested that the Swedish proposal should be slightly modified, as follows :

"Sweden proposes that it should be recommended that the list of signs... etc."

Captain Luymes (Netherlands) was in agreement with Commodore Reinius as to the utility of such a list of abbreviations. The conception of it was a wrong one, however, the book being too bulky and containing a great deal of information absolutely unnecessary to mariners. For instance, names of different kinds of coral or bottom, such as madrepora, diatoms, manganese, had been inserted, in which mariners were in no way concerned.

Lt-Comdr Monti (Argentine) said that the Argentine Delegation was of opinion that this proposal could not be accepted as now suggested by Sweden, because it had to be considered also from another point of view.

The fact that a country which made publications, issued them in a language different from its own, in addition to its own, implied an increase of work for the editing country, which would be useful only to those countries in which the English language was used.

Therefore the Swedish proposal placed countries not using the English language at a disadvantage.

The Argentine Delegate added that for the last fifteen years, the Hydrographic Office of his country had used every endeavour to publish all documents referring to Hydrography, Navigation and Lighthouses on its own coasts and that very useful information had been obtained for that purpose from British documents.

Taking advantage of the present opportunity he desired to pay tribute to the work of the British Admiralty and especially to that of the great Fitz-Roy; nevertheless, the Argentine Delegation must oppose the Swedish proposal, because it (the Argentine Delegation) considered that all languages should be placed on the same footing.

The Argentine Delegate closed his remarks by saying that he thoroughly approved both the Comment of the Bureau referring to the above proposal, and the work which the Bureau proposed to undertake, *i.e.* to draw up an international list of signs and abbreviations. He asked the other members of the Committee to adhere to the Bureau's standpoint, which reads as follows :—

"However, as soon as the international list of signs and abbreviations, which is in hand now, has been issued, translation will no longer be required, because every symbol will be shown and described, and the abbreviation will be given in 12 languages besides English."

Captain Hori (Japan) asked whether it would not be advisable to discuss, together with the Swedish proposal, another proposal made by the Bureau to be found in the Supplement to the Proposals made by the States Members and the Directing Committee of the Bureau.

The **Chairman** read out that proposal, as follows :

"The Bureau proposes that :

"the Conference decide whether the list of Symbols and Abbreviations be

(a) so drawn up as to be principally of use to chart users, or

(b) in a such manner that they may be regarded more in the light of a guide to chart makers".

Commodore Reinius (Sweden) said that the meaning of the proposal was not the same. The Swedish proposal concerned a List of Signs and Abbreviations for each nation, whereas the Bureau's proposal referred to an international list which was being prepared by the Bureau.

The **Chairman** said that the two proposals were in fact independent of one another.

Captain Chen (China) said that his Delegation was ready to accept an international list of Signs and Abbreviations when such a list had been distributed to all the States Members. His Delegation hoped the Bureau would fix a date for the adoption of this international list, so that the symbols shown on this list could be entered simultaneously on all new hydrographic charts which might be published from that date onwards.

The Chinese Delegate supported, on the other hand, the proposal made by the Bureau in paragraph II, according to which the translation of this list of abbreviations was no longer necessary; it would result, he said, in a greater simplicity in symbols which could be used for all kinds of Charts, Sketches and Publications.

M. de Vanssay (France) asked whether Sweden would not be partially satisfied if the I. H. B. agreed to publish, at the same time as the volume, a series of booklets which would cost less and be handier.

Commodore Reinius (Sweden) remarked that for Transatlantic liners, for example, a list of signs and abbreviations for the coasts of Africa, China, and elsewhere would be useless. Such a general list would be useful only to Hydrographic Offices and certain categories of ships.

He then said that the Swedish proposal was mainly inspired by the facility which the English translation of the information would give.

Commander Haselfoot (Great Britain) asked that the international list in question should be drawn up according to the model already adopted by the U. S. A., an excellent work which it was only necessary to bring up to date. This Manual was arranged according to country and section, and was very easy to read.

He added that if some Members of the Conference wished a list to be drawn up for the use of mariners, it would be sufficient to make a condensed edition of what had already been accomplished.

Captain Luymes (Netherlands) thought that as the proposal in the Supplement was being discussed, it should first be investigated whether the list was to be drawn up so as to be exclusively (not principally) of use to mariners and also to cartographers. He thought also that this question, as suggested by the Bureau, should have been settled before undertaking the collection of material for the composition of this list of signs and abbreviations.

According to his idea, this list should be used exclusively by mariners; nevertheless, if the principles adopted were acted upon, it would result in a very large and cumbersome volume for them.

A list for the use of cartographers could be drawn up afterwards, if the majority of the States Members considered it desirable. He held the opinion, however, that the national lists were sufficient for hydrographers, if the States who have languages less known, or who have a non-Roman alphabet would give an English translation in their lists. It would be better still if each State published two lists namely, one in their own language and one in English.

The **Chairman** expressed the view that to avoid the discussion drifting on indefinitely, it should be divided up.

Therefore, he declared the discussion open as to whether it were better to have a list in English, such as Sweden proposed.

Captain Hori (Japan) said that, in Japan, the Swedish proposal had already been adopted. He added that the Japanese Delegation also adhered to the Comment of the Bureau.

Lieutenant-Commander Golemis (Greece) said that his Delegation also agreed to this Comment.

He pointed out, however, that in this comment "every symbol would be shown and described" and that terms were to be found in the list which were not understood in every country. The Greek Delegation proposed therefore that the list should be accompanied by an exact definition of those terms, in English and in French, as given by the different countries.

The **Chairman** proposed that the Committee should decide on the following text :

"The list of signs should be given in the national language and in English."

M. de Vanssay (France) asked if this list would be drawn up by each country or by the I. H. B.

Captain Luymes (Netherlands) thought that it would be better if each country gave an English translation of its list of abbreviations and that, independently of this, the Bureau should draw up a list in twelve languages, as had been suggested.

Commodore Reinius (Sweden) said that the Swedish Delegation submitted the following new wording :

"It is recommended that the List of Signs and Abbreviations of all countries which do not use the English language should be translated into English."

Lieutenant-Commander Golemis (Greece) thought that the proposal should be modified in view of the international list which was being issued by the I. H. B. The following words should be added to the Swedish proposal : ".....after the international list, to be drawn up by the Bureau, has been issued."

Commodore Reinius (Sweden) said that it was the business of every country to decide at what moment it was practicable for them to make this English translation.

The **Chairman** invited the Committee to decide on the following text, as proposed by the Swedish Delegation :

"It is recommended that each State which does not use the English language should publish, as soon as possible, a translation into English of the list of its signs and abbreviations."

Rejected by 7 votes to 6, with 2 abstentions.

The following Delegations replied in the negative :

Japan - France - Greece - Portugal - Spain - Argentine - Italy.

The following Delegations replied in the affirmative :

Sweden - Egypt - Denmark - Netherlands - Germany - China.

Great Britain and British India abstained.

The **Chairman** asked if there was another proposal on the same subject.

Captain Luymes (Netherlands) asked if the proposed text would have any chance of being approved if the words "a translation into English or French" were used, instead of "a translation into English".

M. de Vanssay (France) thought that there would be but little change, because this was chiefly a question of expense ; many countries did not wish to involve themselves in an expense of this nature.

Captain Luymes (Netherlands) replied that it was only a recommendation, and not an obligation.

Commander Benitez (Spain) observed that each country could make the translation, and that the publication could be left to the Bureau.

Commodore Reinius (Sweden) pointed out that each country now published a National List of Signs and Abbreviations. He asked that this list might also have a translation into English and he adhered to the amendment which said that this translation could be either in English or in French.

The **Chairman** observed that the Swedish proposal had been rejected. He asked if the Committee wished to vote on this again, with the amendment.

Captain Luymes (Netherlands) wished to know if the Delegations would vote differently on the amended text just proposed by him.

Lieutenant-Commander Milne Henderson (British India) said that he was aware that the I. H. B. was now drawing up an international list, in view of which each country had already submitted a national list to the Bureau. Later on, he said, we should see what form this list would take, and since this list would be in twelve languages, any translation would become superfluous.

Captain Hori (Japan) agreed absolutely with this view.

Lieutenant-Commander Golemis (Greece) thought that there was room for improvement in this international list.

The **Chairman** observed that all the States had sent their lists to the Bureau, but the International List had not yet been issued.

He then stated that the discussion had returned to its starting point, and he considered that the Bureau's proposal on page 7 of the Supplement should now be examined.

The Bureau proposes that :

" the Conference decide whether the list of symbols and abbreviations be
(a) so drawn up as to be principally of use to chart users, or

(b) in such a manner that they may be regarded more in the light of a guide to chart makers ".

Commodore Reinius (Sweden) was in agreement with **Captain Luymes** in principle; he considered also that this list should be intended principally for chart users.

Captain Luymes (Netherlands) said that the word "*exclusively*" should even be used.

Commodore Reinius (Sweden) preferred to say "*chiefly*".

Captain Hori (Japan) agreed with this opinion.

Secondly, he thought it preferable to have two kinds of lists if possible.

Commander Haselfoot (Great Britain) said he was absolutely in agreement with **Captain Luymes**. These lists should be drawn up for the exclusive use of mariners. All cartographers had lists of abbreviations in their offices, where they could easily consult them, whereas mariners must have a chart on which information can be found at once.

The British Delegate saw no reason why the exchange of lists between various Hydrographic Offices should not continue as in the past.

M. de Vanssay (France) agreed with the Japanese Delegate that it would be useful to have two lists, one for cartographers and a simpler one for mariners.

Lieutenant-Commander Gomelis (Greece) and

Captain Chen (China) agreed with this view.

The **Chairman** proposed that this question should be voted on in two parts.

He put to the vote the following text :

" The Committee considers that the Bureau should prepare an international List of Abbreviations exclusively for the use of mariners ".

Adopted by 14 votes to 1.

The following Delegations voted in the affirmative :

Argentina - China - Denmark - Egypt - British Empire - France - Germany - Italy - Japan - Netherlands - Portugal - Spain - Sweden - British India.

Greece voted in the negative.

The Chairman put to the vote the second part of the proposal :

" another List of Signs and Abbreviations for the use of cartographers ".

Adopted by 10 votes to 5.

The following Delegations voted in the affirmative :

Germany - China - Denmark - Egypt - Spain - France - Greece - Japan - Netherlands - Sweden.

The following Delegations voted in the negative :

Argentina - British Empire - British India - Italy and Portugal.

Mr. Richards (Egypt) observed that it had not been decided how this second list for the use of Hydrographic Offices would be compiled and distributed, and whether it would be printed or mimeographed ; it was, besides, a question of expense which was not perhaps within the province of the charts Committee, but rather that of the Committee on the Work of the Bureau.

As it did not appear that the number of copies of this list would have to be very large, — 50 at the most — it would be hardly worth while to go to the expense of printing.

The Chairman replied that the proposal adopted by the Committee had only the value of a recommendation to the Plenary Session.

He then proposed to proceed to the discussion on :

B) SYMBOLS FOR WIRELESS STATIONS.

M. Zacharias (Germany) announced that the German Delegation had proposals to make which would be submitted to the Committee to-morrow.

The Chairman said that in consequence, this question would be adjourned to the next sitting.

He then opened the discussion on :

C) SYMBOL FOR SUNKEN ROCK.

Norway proposed as a symbol a cross surrounded by a dotted circle, with the depth indicated on the contour of the circle.

The Chairman stated that up till now there had simply been a dotted circumference, and when the rock was less than 10 metres below the surface, one put a cross and the depth was indicated at the centre of the circle. He was not sure whether the system by which the depth was indicated on the circumference of the circle was more practical.

M. de Vanssay (France) agreed with the Comment of the Bureau (*), but said that it was well understood that this sign was not recommended for Charts in general.

(*) COMMENT OF THE BUREAU.

The symbol was discussed at the London Conference (*See Report of Proceedings page 24, resolution E : discussion, page 83 and 84, par. 3 to 7*) at which NORWAY made the same proposal. Every other country agreed that the symbol, without depth indicated, should be used for sunken rocks with depths of 2 Metres (6 feet), and less over them at low water.

Since the symbol proposed by NORWAY will be understood by everybody and cannot give rise to misunderstanding, the Bureau sees no objection to its adoption by that country.

Commodore Reinius (Sweden) said that before coming to this Conference the Delegates of Norway, Denmark and Sweden had met at Stockholm in order to examine these symbols, and that they were in agreement as to their use. Sweden already used them on her charts.

The Swedish Delegate then proposed to modify the second paragraph of the Comment of the Bureau, as follows :

" Since the symbol proposed by Norway will be understood by everybody and cannot give rise to misunderstanding, the Bureau sees no objection to the adoption of this symbol ".

Captain Luymes (Netherlands) said he was sure that the Resolution of the London Conference referred to in the Comment of the Bureau had not been quoted in full. He was anxious to give the complete wording. (He read out the text (**).

The Netherlands Delegate thought it might be concluded from the text of this Resolution that, in London, it was thought desirable to have a symbol for small rocks above which there was more than 2 metres of water. It was evident that in this case, the chart should give both the symbol and the depth, because the symbol does not necessarily represent a dangerous point for all ships.

Previously, the Netherlands had marked these rocks on their charts by a cross surrounded by a line of dots with the depth marked in brackets. The Netherlands Delegate considered that this method was preferable to that of Norway. On the other hand, he thought he should oppose the opinion given by the Bureau in the last paragraph of its comment. To accept that a country might adopt, for itself alone, a symbol which was peculiar to that country, was in opposition to the standardisation of charts.

The Bureau ought to have given its opinion on the question ; namely whether this symbol were necessary or not. In the first case, the Bureau should have made a proposal as to the symbol to be adopted ; in the second case, it should have recommended the rejection of the Norwegian proposal.

Commander Haselfoot (Great Britain) declared himself in agreement with the opinion expressed by the French Delegation.

He saw no reason why the Norwegian Hydrographic Office should not adopt the symbol in question, but the British Hydrographic Office preferred not to use it.


Commodore Reinius (Sweden), wanted the last paragraph of the Bureau's Comment to be altered as follows :

" Since the proposal made by Norway would be understood by everybody and cannot give rise to misunderstanding the Bureau sees no objection to this symbol being adopted by those countries which deem it necessary ".

The Chairman wondered what advantage would accrue in putting the number indicating the depth on the circumference of the circle. It seemed that that would prejudice the clearness of the chart.

Commodore Reinius (Sweden) replied that the proposal emanated from Captain Björset, who was strongly of the opinion that the Conference should adopt this symbol. He said that, along the coasts of his country, there were

(**) SUNKEN ROCKS OR ROCKS ALWAYS COVERED.

It is agreed to adopt the symbol  for rocks with depths of 6 feet or 2 metres and less over them at Low Water, or for any rock over which depth is unknown, or where it is undesirable to insert the depth over it owing to the scale of the chart being too small.

The Norwegian Delegate made a reservation. (See Section 22, page 62).

many very narrow channels, and if in this symbol the number were placed in the centre instead of a cross, the same precision as to the exact position of the rocks would not be obtained.

M. de Vanssay (France) asked if there would be any objection to putting the number for the depth in brackets.

Commodore Reinius (Sweden) thought that the Norwegian Delegate would not like that solution.

The **Chairman** also considered that the brackets would interfere with the reading of small charts especially.

Captain Luymes (Netherlands) said that the Netherlands once adopted the system of the cross with the dotted line around, with the depth indicated in brackets. They gave it up because this method was not accepted at the London Conference. All the same, it was the system he preferred. He objected to the wording just proposed by the Swedish Delegate, because he thought it was not on the road which led to standardisation. A decision must be taken which should be of such a nature that it could be applied *generally*.

Commodore Reinius (Sweden) declared himself entirely in favour of the standardisation of Signs and Abbreviations, but he thought it was not possible to avoid the fact that in certain countries with a special geographical or topographical situation necessitating the use of special symbols,—such as Norway—special symbols must be used in order to render charts both better and clearer. It was this which led the Swedish Delegation to propose the adoption of this special symbol. If this was explained very clearly in the title of the chart, the Swedish Delegate saw no reason why this symbol should not be adopted by that country.

Captain Luymes (Netherlands) explained that if special signs were adopted for certain countries, the door was opened to continual modifications, and there was a risk of going too far in that direction.

Even if the proposed symbol seemed to be unnecessary in some cases, there was no objection to making it an international symbol. Those countries which had no need for it would not use it; Holland, for instance, on whose coasts there were no rocks; but it was far better to adopt it as an international symbol, than to have it as a private symbol for such and such a country.

Lieutenant-Commander Golemis (Greece) did not agree with the Norwegian Delegation because the symbol referred to would not stand on the actual spot where the sounding had been taken.

Nor could the Greek Delegate adhere to the Comment of the Bureau, because it conflicted with the standardisation of charts. He wished to point out in this connection, that an addition should be made to the effect that the similar symbol for sunken rocks lying at a depth of two metres or less above low water was also defective. Experience had proved that in several cases such rocks had been mistaken by mariners for isolated uncovered rocks. This could be avoided by changing the continuous lines which formed the cross

into dotted lines :—



Commodore Reinius (Sweden) in reply to the Greek Delegate's remark said that in his country, there were so many of these rocks that it was impossible to place the figures at the very spots where these rocks lay.

The **Chairman** thought that a vote might be taken on the following proposal :

“Can the proposal establishing special symbols for the charts of certain countries be taken into consideration, owing to the fact that the Bureau is dealing with the standardisation of symbols?”

Commodore Reinius (Sweden) remarked that the proposal concerned the Norwegian Delegation especially. He thought therefore that it would be difficult to solve the question in the absence of the Norwegian Delegate, and requested that the latter might be allowed to support his opinion before the Committee.

Lieutenant-Commander Golemis (Greece) asked if the Norwegian Delegate could not explain his point of view at the Plenary Session.

The **Chairman** expressed the opinion that if this question were to be raised at the Plenary Session, it might result in too long a debate. Moreover, the Plenary Session dealt only with proposals or recommendations brought forward by the Committees.

In order to meet the wish expressed by the Swedish Delegate however, the **Chairman** suggested that the discussion be held over, with a view to hearing the Norwegian Delegate to-morrow in defence of his proposal.

The continuation of the discussion was adjourned till the following day's sitting.

The **Chairman** asked the Committee when the next sitting should take place.

The Committee decided to meet the next day at 0900.

The sitting was adjourned at 11 45.

CHAPTER III.

The third meeting of Committee "D" was held at 0915, on Saturday 30th October 1926, Commander C. Baldi in the Chair.

The **Chairman** said that the President of the Conference had asked him whether the discussions would not progress more rapidly if each Delegation were represented by one Member only. Personally he did not think that this would give the required result, especially as, if a Delegation were represented by more than one member, it would probably be because each of them had a special subject to deal with.

Commander Haselfoot (Great Britain) asked if, for a technical question, he might be allowed to be replaced by a Member of his Delegation who was not a member of the Committee.

The **Chairman** saw no objection to this.

He then announced that he had received a proposal from the Egyptian Delegation concerning the exchange of corrected charts. This would be dealt with when the subject to which this proposal referred came to be examined.

Mr. Richards (Egypt) said that he had introduced his proposal in accordance with the desire expressed yesterday by the Chairman.

The **Chairman** said that this proposal would be typed and distributed.

C) SYMBOL FOR SUNKEN ROCKS (*cont.*).

The **Chairman** recalled that the discussion on the question of submerged rocks of small extent (pinnacles) had been suspended yesterday, in order to allow for Captain Björset's speech. He now proposed to hear the Norwegian Delegate on this question.

Captain Björset (Norway) requested that he might illustrate his lecture on the blackboard. Supporting the proposal introduced by the Norwegian Delegation, he explained as follows, illustrating his remarks by blackboard drawings.

He did not think that the Bureau had properly understood the Norwegian proposal, and to support his opinion, he commenced by reading out the Comment of the Bureau (see previous chapter).

It was evident, he said, that the Bureau could not object to Norway adopting any special sign for certain parts of her coasts. There was no need for Norway to ask permission to use any sign which might suit her. She merely wished that any such sign should be adopted generally or should at least be studied with great care by all countries whose coasts were at all analogous to those of Norway.

The Norwegian coast, he said, was extremely broken up. It had no resemblance whatever to the coasts of Holland, England, Belgium, or part of Germany. Along the coasts of Norway, there were more than 150,000 islands and islets, and he gave as an example, that in 1883, when cruising in Sunda Strait, immediately after the Javan earthquake, he observed numerous pinnacles emerging from the surface of the Ocean, somewhat similar to those which he wished to indicate by the use of the symbol the adoption of which he

was anxious to introduce. The same features often will be found on the Greek, Danish, Scotch and Icelandic coasts.

By its comment, the Bureau gave one the impression that this question had been settled, and that it was not worth while returning to the subject. This, said the Norwegian Delegate, was a mistake, as the question was of primary importance; and the Committee must discuss it, since the proposal had been officially and formally introduced by the Delegation.

The Norwegian Delegate said that he had explained that theory to Captain Webster, late Director of Navigation at the British Admiralty, who, though he did not absolutely agree with him, quite understood his point of view.

The Norwegian Delegate further explained that it would be impossible to mistake the figures indicating submerged rocks for the usual figures marking depth, as the former would stand out in totally different type. They would appear in Egyptian or block characters, whilst the characters used to show ordinary depth were absolutely different.

He then said that Norway used this symbol also for a rather large dangerous area, sand bank or any other danger, but in his opinion, this symbol was not sufficiently accurate to represent a pinnacle or a rocky point. On the contrary, a cross immediately attracted the attention of the mariner, warned him, and indicated the danger which he should avoid. The other symbol did not stand out as conspicuously; besides it was also used on Norwegian charts to mark a depth of at least 10 meters.

The Norwegian Delegate said that the representatives of the Scandinavian States had, before coming to Monaco, held a preliminary Conference at Stockholm and had been unanimous in adopting for the coasts of their countries the symbol now advocated. Such a symbol recalled the object for which it was used; it was small, showed a definite spot, and gave the accurate position of the rocky point, the existence of which it was intended to point out.

The speaker admitted that, in certain cases, it might be desirable not to insert depth, for instance on an insufficiently large scale chart; at any rate, the cross was such a well known symbol that it might mark a dangerous point. This symbol could not give rise to any misunderstanding whatever, which was not always the case for other methods used by certain countries.

Besides, when it was desired to show on a chart the distance of a buoy or light which marked the presence of this rocky point, it was a very easy matter with the cross system, which gave the exact position. The staff indicating the light or buoy could start from the intersection of the arms of the cross, thus showing the distance and the exact position; if, on the contrary, the other symbol were used, the exact spot of the obstacle would not be shown, because it was very difficult to find the starting point of the staff.

It was with much modesty that the Norwegian Delegate informed the Committee that countries which were near his own and whose coasts had the same characteristics as those of Norway, had adhered to the proposal made by him. He added that it would be no sacrifice for other countries to do the same, for it was to the interest of every country that uniformity and standardisation of symbols should be obtained. If therefore the symbol advocated by the Norwegian Delegation were considered practical, its adoption would render navigation less dangerous and at the same time conform with the idea of the Bureau, which was to standardise symbols.

The Norwegian Delegate therefore hoped that his proposal would be adopted, or that its adoption would at least be considered very seriously by the other Delegates.

As an example, the Norwegian Delegate then drew a chart on the black-board with a few islands, marking some rocky points. He pointed out that on a chart such as this, it would be impossible to use any sign other than a simple cross, and he showed how easy it was to mark the existence of buoys

and beacons. He said that there existed, on the Norwegian coasts, between 10,000 and 11,000 of these buoys and beacons, and that for points so near to one another, it would be impossible to use a method more complicated than that of crosses. Even if figures indicating depths were desired, they could not be inserted for lack of space.

Continuing, Captain BJØRSET said:

"I have permitted myself to introduce the subject at this Conference, as I did not think that this question had been sufficiently dealt with, nor sufficiently elucidated at the International Hydrographic Conference in London 1919. I have also given expression to it by my reservation (page 62 in the Report of Proceedings).

"I should like to point out at this meeting that I am now referring only to those countries whose coasts and sea boards present the same features as those of the Norwegian coasts—that is to say to those countries whose coasts are dotted with multitudes of sunken rocks, shoals and pinnacles, extending over long distances and areas. I would therefore request those Delegates especially who are the Representatives of countries with coasts of this nature, to give the question their earnest consideration.

"As a result of my long experience in hydrographic matters and in my best judgment, I must maintain that such complicated and intricate waters have a *special* need for careful surveying and also for a clear and adequate representation on the chart. In other words, I cannot, in conformity with my position, acknowledge any other procedure than our own with respect to our special submarine topography. In our maritime courts our own charts are the only valid documents. This is no particular claim, it is only in regard to and in view of our mutual aim, namely, to work for uniformity and standardisation.

"If I should succeed in making my voice heard so that my arguments could be acknowledged in principle, I am convinced that a great step towards complete uniformity in charts would be made. As far as I can see, this problem (indication of submarine rocks) is the only difference of any importance existing between British and Norwegian charts, for instance, and I cannot see that my proposal interferes with the decisions made by the Resolutions Adopted, page 24 (Report 1919).

"I am sure you will allow me to enter into details and demonstrate what my proposal entails.

"The crux of the matter lies in the fact that I find it necessary to indicate sunken rocks in conformity with their shape and nature. It has been decided to indicate all sunken rocks in the same way—by the same symbols—at all events on charts not of large scale.

"It is as natural as it is correct to indicate a shoal of great extent σ ,
a sandbank in this way:—



"Such shoals very often will be found on sandy coasts where the ground is sloping or rising smoothly. But when the ground is steep and cliffy, the features of the coast consisting of multitudes of sunken rocks or *pinnacles*, it seems to me to be incorrect to indicate these shoals in the same way as sandbanks, because it would present a wrong picture, a misleading expression of the nature of the topography of the bottom. Such a "bottlenose" or pinnacle should be indicated on the chart in such a way that it covers very little space, so that one can understand and read from the chart its character namely its sharp and peaked shape. In this connection I cannot ignore the fact such a peak rock involves more danger to navigation than a sandbank for instance, for which reason alone it seems to be most suitable to give it a conspicuous indication on the chart.

"On Norwegian charts, as is well known, we indicate such grounds by a distinct symbol, which we find characteristic and significant, *i.e.*, a symbol consisting of a cross, up to a depth of 10 metres. This symbol serves its object, being of very small extent and indicating precisely the position of the top of the rock. This symbol easily becomes part and parcel of the sailor's mental equipment, because it conveys the idea of "warning" and "keep away" by its mere form. I prefer to *indicate* the actual depths as well, but, of course it may be undesirable to do so owing the scale of the chart being too small. Therefore such a cross symbol, without the depth added, must always be looked upon as dangerous for ships.

"To sum up:—

"The Norwegian method of indicating these pinnacles cannot be misunderstood. As far as I can see, the symbols employed by other countries for indicating sunken rocks may *possibly* be misunderstood. We *must* represent our intricate waters in the way we do—there is no getting away from it—only think if buoys and beacons must be indicated—or beacons on the precise summit of the rocks; consequently my line of argument is:—

"Being, according to my best judgment, simply compelled by necessity to use our method to show clearly all the precipitous dangers in our waters and channels, I believe it to be but a modest request that other countries, who have the same coastal features, should adopt our system. It is no sacrifice for them to do so, and I assume that there is full earnestness in our work with respect to obtaining uniformity in the charts of different nations—it is uniformity for which we are all striving. Therefore, if my proposal is regarded as practical, a very important factor in order to increase and intensify safety at sea has been attained, a factor that to a wide extent would contribute towards the realisation of the whole basic concept of the Bureau.

"Therefore I venture to cherish the hope that my views will find favour or at all events that my proposal *will be given earnest consideration*. A great step forward will have been made if only the *thought* has made headway and has become part of the sailor's nature, and there will be a growing understanding as time passes."

Lieutenant-Commander Lopes (Portugal) considered that the question was sufficiently well understood and that it included certain points on which decisions were taken at the London Conference. It would be desirable to decide at once whether the one or the other of the systems should be adopted, for all countries of course, because the idea of an international symbol and also the desirability that this symbol should not be constantly changed, should be always be borne in mind, in order to avoid the difficulties resulting for mariners and Hydrographic Offices.

Captain Luymes (Netherlands) declared himself to be, on the whole, in agreement with the Norwegian proposal, and with Captain Björset's criticism on the Comment of the Bureau. He also thought that if any particular symbol had to be adopted, it should be international, otherwise the idea of the standardisation of symbols was lost.

The Netherlands Delegate said he understood Captain Björset's reasoning thus, that the symbol; namely the figure surrounded by a dotted line, was only suitable for an obstacle covering a certain area, and for a fairly large scale chart. All the same, he had one objection to make against the adoption of the Norwegian symbol as explained. He would prefer the figure to be put in brackets; he did not really think that the symbol advocated by Captain Björset would be clear enough for mariners. Thus, a Portuguese navigator, for instance, not being used to Norwegian charts, might very easily misunderstand the symbol proposed, because the difference between the depth figure referring to the submerged rock and other depth figures only lay in the fact that the former was in upright and thick characters, whereas the depth figures, inserted in their proper place, would be in italics and finer.

In principle, the Netherlands' Delegate agreed with Captain Björset's, suggestion, but for its practical application, he would advocate a choice between the symbol as put forward by Captain Björset, and the same symbol with the depth number shown in brackets. He then pointed out that the U. S. A. already show on their charts the depth in upright characters, and that consequently the only difference between the figure showing depth and the figure showing a danger, would be in the fact that the latter would appear in thick characters and the former in finer ones.

Captain H. O. Ravn (Denmark) declared himself in agreement with the Netherlands' Delegate.

Captain Björset (Norway) pointed out that the symbol, the adoption of which was proposed by the Netherlands' Delegate, that is with the figure in brackets, next to the symbol, had already been adopted by Denmark for the coasts of Iceland. This system was efficient, but sometimes inconvenient because it took up a lot of space.

Anyhow, he said, the important point of the Norwegian proposal was the adoption of a cross to indicate the exact position of the danger. The question of how the figure should appear was of secondary consideration.

The **Chairman** referring to the Comment of the Bureau, thought that it should be agreed that decisions once taken at the London Conference should not be rediscussed. It was remarked in the comment that :

" Every other country agreed that the symbol, without depth indicated, should be used for sunken rocks, with 2 metres (6 feet), and less over them at low water ".

Commander Bouveng (Sweden) gave as his opinion that the Comment of the Bureau should be modified in any case. Besides, he saw no objection to the Norwegian system being adopted by the Conference, for his country had already agreed to it.

Captain Luymes (Netherlands) thought he had understood the observation of the Chairman to mean that a decision taken at a previous conference could not be rediscussed. The Netherlands' Delegate could not agree with this point of view. He considered that the present Conference, and also any future Conference, could rediscuss any decision of a previous Conference, should there be any good reason to do so.

The **Chairman** remarked that this was a question of principle, as to whether a decision taken at the London Conference could be rediscussed or not. This could perhaps be put to the Plenary Session.

Captain Luymes (Netherlands) in order to support his argument, pointed out that the same question was answered in the affirmative concerning symbols for wireless stations. The Bureau itself, for certain reasons which it gave, proposed the rediscussion of a decision taken at the London Conference. The case was absolutely the same: Great Britain had made a proposal, and the Bureau had adhered to it.

The **Chairman** said that the Norwegian proposal might be voted on, with the reservation that it be left to the Plenary Session to decide whether a decision taken at a previous conference could be rediscussed. Consequently, he proposed to put to the vote the following proposal :

" With the reservation that the Plenary Session accepts in principle that a decision taken at the London Conference can be modified,

The Committee proposes :

- 1) either that the Norwegian proposal be adopted.
- 2) or that the proposal of the Netherlands Delegation be adopted.
- 3) or that the Norwegian proposal be rejected ".

Captain Björset (Norway) said that the difference between the Norwegian

proposal and that of the Netherlands' Delegate was simply a question of parenthesis. The two proposals could be merged into one.

The **Chairman** modified his proposal. The Committee would be called upon to decide firstly on the principle and secondly on its application.

Commandar Haselfoot (Great Britain) said that his country would shortly propose the adoption of a line — — — — for the six-fathom line, a line in which only Great Britain and the U. S. A. were concerned. If this line — — — — were adopted, it might be confused with the dotted line which surrounded the cross in the Norwegian proposal. It might be thought to mean a dangerous zone limited by a 6 fathom contour line.

The **Chairman** observed that, in the Norwegian proposal, it was a question not of fathoms, but of metres.

Captain Björset (Norway) pointed out a mistake on page 8 in the wording of the Norwegian proposal. The sketches reproduced were not exact. The number showing the depth of the rock should not appear on the dotted line, but either inside or outside the circle, at the side of the cross.

The **Chairman** put to the vote the principle which was common to both the Norwegian and Netherlands proposals.

This principle was adopted by 11 votes to three, two abstaining.

The following Delegations answered in the affirmative :

Germany - China - Egypt - Spain - Italy - Sweden - Norway - Denmark
France - Portugal - Netherlands.

The following Delegations answered in the negative :

Argentina - Greece - Japan.

The following Delegations abstained :

British Empire and British India.

The **Chairman** put to the vote the Norwegian and the Netherlands proposals, pointing out that it was understood that the Delegations which answer *Yes* were in favour of the Norwegian proposal, and those who answered *No* were in favour of the Netherlands proposal.

The Norwegian proposal was adopted by 10 Yes to 4 No, with one abstention.

The following Delegations replied *Yes* :

Germany - Egypt - Spain - Greece - Italy - Sweden - Argentina - British Empire - British India - Portugal.

The following Delegations replied *No* :

China - Denmark - France - Netherlands.

Japan abstained.

The **Chairman** invited the Committee to return now to the examination of

B) SYMBOLS FOR WIRELESS STATIONS (*cont.*)

M. Zacharias (Germany) said that the proposals which the German Delegation had submitted to the Bureau were still being translated. He asked that the discussion of this subject might be put off until the German proposals had been distributed.

The **Chairman** said that the examination of this subject was therefore put off to a future sitting, and opened the discussion on :

D) SYMBOLS FOR WRECKS.

Great Britain proposes that the following modifications be made in the signification of the accepted chart symbols for wrecks :

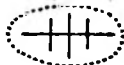
“to denote a wreck over which there is a depth of 8 fathoms (14.6 metres) or less, but over which the exact depth is unknown

"to denote a wreck over which there is a depth of more than 8 fathoms (14.6 metres), but over which the exact depth is unknown".

Commander Haselfoot (Great Britain) asked if the Committee would be good enough to authorise Commander Brandon to replace him, Commander Brandon being an expert in the matter and better qualified than he to take part in the discussion.

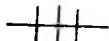
Commander Brandon (British Empire) said that the situation had changed somewhat since Great Britain made the proposal which the Delegates had in front of them. To make the position clear he wished to point out that the question of wrecks was very complicated at present, because of the large number of ships which were sunk during the late war. The British Admiralty, having recently undertaken a revision of the wrecks shown on the charts of the British coast, had come to the conclusion that the system actually in force at present was much too rigid. That was why it wished to eliminate completely any definite limit, whether it were 8 or 10 fathoms. The Admiralty would prefer to decide in each case whether the wreck was dangerous or not, whatever the depth over it. It was not much use to have a fixed limit of depth for what might be considered a danger to navigation. The degree of danger did not depend on depth only, but also on general conditions, such as height of waves, etc... On a very exposed coast, such as the west coast of France or that of Ireland, a wreck might be a danger, whilst it would not be so at the same depth in comparatively sheltered waters like those of the Sound or Belts.

The British Delegate proposed therefore to adopt the symbol



for wrecks considered dangerous to surface navigation, irrespective of the depth over them, but the general conditions being taken into account, and further

to adopt the symbol



for wrecks which were only dangerous to submarines and trawlers. The 8 fathom limit would be used for wrecks over which the exact depth was known. Wrecks with more than 8 fathoms over them would only be shown on the largest scale charts; those with 8 fathoms or less over them, on all charts where it was possible to do so.

If this principle were adopted, the British Delegation would submit to the Members of the Committee a draft Notice to Mariners which would replace that at present in force.

(The British Delegate distributed the English and French texts of this draft.)


WRECKS — UNIFORM SYSTEM FOR CORRECTION OF CHARTS.

With a view to establishing a uniform system for the correction of charts in regard to sunken wrecks, the undermentioned procedure has been adopted and is now being gradually introduced on the Admiralty charts:—

1. Wrecks which lie in positions where the depth of water exceeds 100 fms. (102^m9) will not be shown on the charts.

2. In positions where the depth of water does not exceed 100 fms. (182^m9) wrecks will be classified and charted as follows:

(a) Wrecks showing any portion of the hull or superstructure above low water will be shown

on all appropriate charts by the symbol "  wreck. "

(b) Wrecks over which the exact depth of water is known will be shown by the symbol

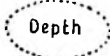
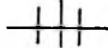
"  Depth Wreck. " The depth being in feet or fathoms agreeable to the soundings on the

chart and referring to low water. Where the depth exceeds 8 fms. (14^m6) the wreck will be shown on the largest scale chart affected only.

(c) *Wrecks over which the exact depth is unknown and which are, or, owing to position and lack of definite information to the contrary, must be considered as dangerous to navigation* will be

shown on all the appropriate charts the by symbol "  wreck. "

(d) *Wrecks over which the exact depth is unknown but which are not considered dangerous to surface navigation* will only be shown on the largest scale chart embracing the position and

will be indicated by the symbol "  wreck. "

(e) *Remains of a wreck no longer a danger to surface navigation, but to be avoided by vessels anchoring, trawling, etc.,* will be shown, on the largest scale chart only, by the symbol

"  Foul. "

3. On the largest scale charts affected the year date of the wreck will also be inserted when known. On small scale charts the word " wreck " will be omitted.

4. On the smaller scale charts wrecks will not invariably be shown in the waters covered by larger scales. When necessary a note to this effect will be inserted on the chart.

5. Doubtful wrecks will be marked on large scale charts with the note " *E.D.* ", " *P.D.* ", or " *P.A.* ", signifying " Existence Doubtful ", " Position Doubtful ", or " Position Approximate ", as necessary, in order to differentiate them from wrecks the particulars of which are authentically known.

6. The position of the centre of the wrecks is indicated in the case of 2 (a) by a small circle on the water line at the base of the mast, in the cases of 2 (b) and 2 (c) by the intersection of the horizontal line and the middle vertical line, whilst in the cases of 2 (d) and 2 (e) it is the centre of the dotted circle.

The Chairman, as he considered that the original proposal had been modified, thought that the Delegates should be given time to study the new text, and proposed in consequence to postpone the discussion to a future sitting.

Commander Brandon (Great Britain) said that he would prefer this course

The Chairman then adjourned the end of the discussion (Commander Brandon withdrew).

The Chairman, with the object of saving time begged those Delegates who had proposals to make, to introduce them before the sitting, in order that the Committee might not be obliged frequently to suspend the examination of texts submitted to them.

Lieutenant-Commander Golemis (Greece) announced that his Delegation was about to introduce the following proposal: — " the symbol for submerged wrecks will be marked by dotted lines ".

The Chairman would have liked to have put to discussion the subject of depth contours, but the thought that it would be better to leave that to a further sitting, as everything could not be debated to-day, and the French Delegate, M. de Vanssay had to serve on another Committee. He proposed therefore to pass on to the examination of:

2. INDICATION OF A CHANNEL DREDGED TO A CERTAIN DEPTH

The Bureau proposes that:

" channels dredged to a certain depth should be specially marked as such, whenever the scale of the chart permits this to be done. This information should be inserted in the Sailing Directions as well. "

The Chairman said that many nations were in the habit of mentioning " Zone dredged to a certain depth " when a zone had been dredged in a harbour; meanwhile it was not certain that this zone had been completely dred-

ged. He drew the attention of the Committee to this matter, the more so that when a zone had been dredged soundings were taken and the figures of the survey were put on the chart.

Lieutenant-Commander Monti (Argentine) said that the Argentine Delegation was in complete agreement with the proposal made by the Bureau. The Argentine Hydrographic Office already inserted this information on its charts.

Captain Hori (Japan) said that the Japanese Delegation also approved the proposals of the Bureau. It recommended in addition that the colour used should be light blue, and that the information should give the depth of the dredging.

Captain Luymes (Netherlands) said that in principle, he was against any notes being inserted on charts, because these charts should be, as far as possible, purely graphic documents, legible for all seamen. That which could not be shown in a graphic manner should be inserted in the Sailing Directions and not on charts. Moreover, if this proposal were adopted, mariners would have less confidence with regard to channels which were not marked in this way, whilst there might be no reason whatever to dredge many of these channels, for example, in alluvial regions.

In reply to the observation made by the Japanese Delegate, the Netherlands Delegate said that it was difficult to add another colour to charts, when they were printed directly from copper plates.

Commander Haselfoot (Great Britain) directed attention to the fact that there were two categories of dredging, between which the Bureau did not seem to differentiate sufficiently; the first case was where a channel had been completely dredged and verified subsequently by taking soundings the second case was where a bar or some such apparatus has been swept along a certain portion of the channel, to see if any obstacle existed.

The British Delegate did not clearly see to which of these two operations the Bureau's proposal applied.

He then suggested that it should be clearly stated which of these two operations had been carried out; whether a channel had been actually dredged or whether, on the contrary, it had been merely swept to a certain depth, to search for obstacles.

Lieutenant-Commander Golemis (Greece) supported the observations made by the British Delegate.

The **Chairman** proposed to put the proposal to the vote, subdivided as follows:—

First, the Committee proposes that:

"channels dredged to a certain depth should be specially marked as such mentioning the method of dredging and the depth, whenever the scale of the chart permits this to be done".

This text was adopted by 11 votes to four.

The following Delegations voted *Yes*:

Germany - China - Egypt - Greece - Sweden - Argentina - Denmark - British Empire - France - British India - Japan.

The following Delegations voted *No*:

Spain - Italy - Netherlands - Portugal.

The **Chairman** put to the vote the remainder of the proposal:

"This information should be inserted in the Sailing Directions as well".

Unanimously adopted except by China.

The **Chairman** asked the Committee whether this should be mentioned on charts.

Commander Rasikotsicas (Greece) observed that it was difficult to insert very lengthy information on charts. He suggested, however, that what-

ever be the method of dredging used, the depth of the channel available for use be marked on the chart.

Captain Luymes (Netherlands) proposed that a guaranteed minimum depth be shown on the charts.

Commander Haselfoot (Great Britain) suggested that charts should also show the date of dredging. It might be shown as "Dredged to.....metres, in the year.....".

The **Chairman** thought that that could be shown in the corrections put on charts, in order to avoid confusion caused by too much writing.

Commander Haselfoot (Great Britain) thought that confusion would occur if the date were indicated by a reference to a date in the corner of the chart. He saw hardly any other means except that of mentioning the date of dredging in brackets after the depth of the channel.

The **Chairman** did not see that the date of dredging the channel was of much interest. It was enough to know that the channel had been dredged, and that its depth was that shown on the chart.

Commander Haselfoot (Great Britain) replied, giving the following as an example: A channel was dredged in 1906, and no more recent information was to be found on the chart, whilst a more recent dredging might possibly have been carried out in 1925, and given different results. The mere fact that dredging was necessary showed that the depth had not remained constant.

Captain Luymes (Netherlands) thought that this was an excellent reason to prove that it was best to insert these observations in the Sailing Directions.

He added that, in his country, there were many channels which were dredged very often, perhaps 4 or 6 times a year. The depth given was shown on the charts, but this depth must not be taken to be always accurate. That was why, on the charts of the Dutch coasts, the advice was printed not to depend exclusively on charts for depths of bars in channels, but to consult the Sailing Directions and Notices to Mariners. Changed depths were periodically inserted in these latter.

The **Chairman** observed that the proposal to put these indications on charts had already been approved. It was now necessary to know what other notices should be put on charts.

He suggested that the following proposal be put to the vote: "Channels dredged to a depth of.....metres". If this wording were approved, the addition "in the year..." could then be voted on.

Commander Haselfoot (Great Britain) much regretted that the United States Representative was not present, for the United States had a special method of indicating dredged channels on their charts. One found such terms as "Controlling depth..." on U. S. Charts, but the British Admiralty had not yet been able to discover exactly what these terms signified.

The **Chairman** put to the vote the first part of the proposal: "Channels dredged to a depth of.....metres". The text was *unanimously adopted*.

The **Chairman** put to the vote the addition "in the year..."

This addition was adopted by all Delegations, with the exception of those of Italy and Sweden.

The **Chairman** announced that, if no one objected, the next sitting would take place on Tuesday at 0900, with the following Agenda: 1) Symbols for wireless stations, and 2) Depth contours.

The sitting adjourned at 11 30.

CHAPTER IV.

The fourth meeting of Committee "D" was held at 0900, on Wednesday, 3rd November 1926, Commander C. Baldi in the Chair.

The **Chairman** said that it was impossible for the Bureau to meet the request of certain Delegates, that the reports of the Committee's debates should be translated in to both French and English, the staff being insufficient to carry out that work.

With the object of hastening proceedings, he suggested that the Charts Committee should, in future, sit at 0900 and 1430.

In accordance with the recommendations made by the Chair yesterday, before the Plenary Session, the Chairman requested the Delegates to avoid lengthening the debates, and to shorten their communications as much as possible.

D) *SYMBOLS FOR WRECKS. (cont.)*

The **Chairman** proposed that the discussion on symbols be continued, and that the question of symbols for wrecks be considered.

He recalled that the system used by Great Britain consisted in dividing wrecks into two categories, *i. e.* (1) wrecks which lie at a depth of 100 fathoms, and (2) wrecks which lie at a lesser depth.

It is desirable he said, that the Committee should consider whether it approves of this division, or whether it would not be preferable that they should be subdivided according to the metric system, considering that many nations make use of the metric system.

M. de Vanssay de Blavous (France) said that the French Delegation regretted that a modification was being proposed in the symbol adopted by an International Conference and having already appeared on many charts. It would be impossible to correct the latter for some time to come.

With reference to the proposal 2, *b*,—new wording*, it seemed that the International Hydrographic Bureau which uses the metre as the only unit, should indicate the limiting depth by a round number of metres, for instance 15 metres, and give the equivalent in fathoms, in brackets.

With reference to the proposal 2, *e*, the French Delegation did not see the necessity for a symbol other than that mentioned in proposal 2, *b*.

The French Hydrographic Office will probably not use the symbol of proposal 2, *e*.

Captain Luymes (Netherlands) suggested that the figure to be adopted as that of the limiting depth should be 200 metres, instead of 100 fathoms. The countries which use the fathoms as a unit might adopt the limiting depth of 100 fathoms.

He declared himself in agreement with the French Delegation to replace the limit of 8 fathoms (14.6 metres) by 15 metres, or 14 metres, in round numbers.

He also agreed with that Delegation in regard to the suppression of paragraph *e*.

He proposed suppressing the word "wreck" on charts. Considering that

(*) *Refers to draft Notice to Mariners (see previous chapter).*

an international symbol is now accepted for wrecks, he said, it seems useless to insert the meaning of the symbol next to it.

Finally, he saw no use in mentioning the date of the wreck, and thought that the suppression of this would clarify charts.

Lieutenant-Commander Golemis (Greece) thought the system used on British Charts excellent. Nevertheless, as Greece used British charts almost exclusively, the Greek Delegation requested the modification of point (e) of the proposal. As the remains of a wreck which is not dangerous to surface navigation, but which should be avoided by ships anchoring, would still be considered as a wreck, the symbol could remain the same as in case (d). The number of symbols for wrecks would thus be reduced to a minimum, which would be a great step towards the unification desired.

On the other hand, as the contour of the symbol proposed in (e) is the general danger line, it might be taken to mean a danger for all ships.

Finally, the speaker asked the opinion of the various Delegations as to whether it would not be more convenient that lines showing sunken wrecks according to the proposals (b) and (d) should be dotted and not continuous.

Commander Haselfoot (Great Britain) said he accepted the modifications proposed as to depths. He also concurred in replacing 8 fathoms by 15 metres, and 100 fathoms by 200 metres.

On the contrary, however, he observed that the modification proposed for the symbols was not included in the question submitted to the Committee, and was not on the Agenda.

Captain Kawamura (Japan) said that the Japanese Delegation had no reason to oppose the British proposal. He would like to remark, however, that his country intended to continue as up to the present, that is to say that they would continue to distinguish between a depth of 20 metres for new charts based on the metric system, and 10 fathoms for those based on fathoms.

That was why the Japanese Delegation would abstain from voting on this proposal.

Captain Luymes (Netherlands) wished to know the opinion of the British Delegation on the proposal which had been made to suppress point (e), and to cancel the word "wreck" with the date on charts.

The **Chairman** suggested voting on points 1. and 2., worded as follows:

1. Wrecks which lie in positions where the depth of water exceeds 100 fathoms (182 m. 9) will not be shown on charts.

2. In positions where the depth of water does not exceed 100 fathoms (182 m. 9), wrecks will be classified and charted as follows:

Captain Schweppe (Germany) did not understand the British proposal as to wrecks whose position only was known.

The **Chairman** insisted that a vote should be taken on the proposal (point 1) which he had just made. This seemed to him quite logical, especially as his proposal in no way affected the correction of charts.

(Approved).

He asked those Delegations who approved the 200 fathoms proposal to raise the hand.

Adopted by all Delegations present, with the exception of that of Japan, which abstained.

The **Chairman** opened the discussion on the text inserted under letter (a):

"Wrecks showing any portion of the hull or superstructure above low water will be shown on all the appropriate charts by the symbol"



Wreck "

Captain Luymes (Netherlands) repeated his question: he wished to know the opinion of the British Delegation on the necessity of inserting the word "wreck" beside the symbol.

Commander Haselfoot (Great Britain) admitted that the insertion of the word "wreck" was not perhaps indispensable, but as the date of the wreck was always given, he was in favour of continuing the system.


The **Chairman** remarked that this proposal was allied to that of the insertion of the date of the wreck.

He put the proposal: "insertion of the word 'wreck' and the date" to the vote.

The proposal was adopted, that is to say that wrecks which show above water would be indicated simply by the ship with the little circle showing the spot where the ship had sunk.

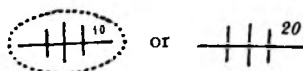
The **Chairman** put text (b) into discussion:

"Wrecks over which the exact depth of water is known will be shown by

the symbol  Wreck': the depth being in feet or fathoms agreeable to

the soundings on the chart and referring to low water. Where the depth exceeds 8 fms. (14 m. 6) the wreck will be shown on the largest scale chart affected only".

Captain Luymes (Netherlands) proposed that the symbol referred to in 2 (b) should be replaced by another which he drew on the blackboard, the latter being similar to the symbol for submerged rocks, using the symbol generally adopted for wrecks. This, he said, would also allow the word "wreck" to be suppressed on charts.



Commander Haselfoot (Great Britain) thought that Captain Luyme's proposal mixed up 2 (b) and 2 (c). He observed that this proposal was similar to that which had been discussed for submerged rocks, and if the depth of the wreck were shown in the middle of a dotted circle, with the word "wreck" beside it, it would not involve a lengthier task than that caused by the adoption of the suggestion made by the Netherlands Delegate.

The **Chairman** made an observation with reference to the symbol. It might happen, said he, that the depth over a rock might be known, but it might not necessarily be known over a wreck. Therefore, according to him, when the depth was not known, it would be preferable not to give the figure.

Captain Luymes (Netherlands) thought that the danger line must be used for everything dangerous to navigation. Likewise, for a wreck which lay at such a depth that it was not dangerous, the symbol —|—|—|— without a danger line might be used.

The **Chairman** asked Captain Luymes to consider the case of a wreck which was not dangerous to navigation and of a wreck which was so.

Captain Luymes (Netherlands) replied that a danger to navigation was always shown in a danger line, by the symbol proposed by him.

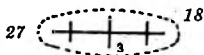
Commander Haselfoot (Great Britain) pointed out that it was logical that those countries which adopted the new symbol for submerged rocks, should also adopt the wreck symbol resulting from the same principles; but that those countries which had not approved of the new symbol could hardly adopt that proposed by Captain Luymes.

In order to avoid prolonging the argument, he said that the British Admiralty would not adopt the symbol proposed for submerged rocks.

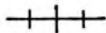
The **Chairman** thought that the Committee had not quite understood Captain Luymes' proposal. He asked him to be more precise.

Captain Luymes (Netherlands) elucidated his proposal as follows :

b) wrecks which are a danger to surface navigation



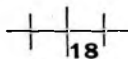
c) wrecks which are not a danger to surface navigation



Commander Haselfoot (Great Britain) to prevent any misunderstanding said that the Notice to Mariners on the subject of wrecks was in the form of a draft, which had not yet been published as a Notice to Mariners.

Captain Luymes (Netherlands) then continued the explanation of his proposal in the following terms :

"if desired, with the depth figure (upright and thick)".



The **Chairman** said that Captain Luymes' proposal consisted therefore, of suppressing (b) (c) and (d) and replacing them by the wording of this proposal.

He invited the Delegations to decide. *Adopted.*

11 Delegations voted in the *affirmative*.

3 Delegations voted in the *negative*.

1 Delegation *abstained*.

The following Delegations voted in the *affirmative* :

Germany - Egypt - Sweden - Denmark - France - Argentina - Portugal - Spain - Italy - Netherlands - Yugo-Slavia.

The following Delegations voted in the *negative* :

China - Great Britain - Greece.

Japan *abstained*.

Commander Haselfoot (Great Britain) asked whether (c) in Captain Luymes' proposal was not similar to that stated in (d) in the British text.

Captain Luymes (Netherlands) replied in the affirmative and added that his proposal was meant to take the place of the British proposal, it being understood that the limit was 15 metres.

Commander Haselfoot (Great Britain) declared that, in spite of his voting against Captain Luymes' proposal considered as a whole, he was willing to accept the limit of 15 metres between the two categories of wrecks.

The **Chairman** said that if there were no objection, the figure might be placed in the centre of the symbol, as was done for the figure 3.

Commander Bouveng (Sweden) was afraid it would be impossible to insert the figure in thick type inside the danger line, because the symbol might be too small.

The **Chairman** remarked that there were two proposals for decision : (1) the amended Norwegian proposal, which consisted in putting the figure inside the circle, and (2) the Netherlands proposal which consisted in putting the number in brackets outside the circle.

With regard to this, he recalled that, during the sitting of 30th October, the Norwegian Delegate, Captain Björset, pointed out a mistake in the Bureau's statement of the Norwegian proposal. He read out Captain Björset's remark, which said : "the sketches reproduced on page 8 in the wording of the Norwegian proposal are not exact. The number showing the depth of the rock should not appear on the dotted line, but either inside or outside the circle, at the side of the cross".

Commander Bouveng (Sweden) was anxious to point out that the Norwegian proposal which had been adopted did not consist in placing the number inside the danger line, but in putting it, without brackets, where possible, on the chart.


Captain Luymes (Netherlands) considering it useless to reopen the discussion on this point, was of opinion that it could be settled that wrecks should be indicated with a number, as well as covered rocks.

Mr. Richards (Egypt) suggested a different symbol, so that the number could be put in the middle of the circle.

The **Chairman** opposed this suggestion because, he said, it would not be opportune to change or augment the number of symbols, and on the other hand, the Committee had already decided on the symbols, and it was not desirable to reopen the discussion.

The discussion on this point was closed.

The **Chairman** opened the discussion on point (e), and read as follows :

"Remains of a wreck no longer a danger to surface navigation, but to be avoided by vessels anchoring, trawling, etc., will be shown on largest scale charts only by the symbol  Foul".

Nobody wishing to speak, point (e) was put to the vote.

Voting resulted in 7 affirmatives and 7 negatives.

The following Delegations answered *Yes* :

China - Egypt - Great Britain - Germany - Sweden - Denmark - Argentine.

The following Delegation answered *No* :

Japan - France - Greece - Netherlands - Portugal - Spain - Italy.

Yugo-Slavia abstained.

Lieutenant-Commander Monti (Argentine) suggested the wording :

"it is desirable that..." instead of "it is decided that..."

The **Chairman** put to the vote paragraph (e) with the modification proposed by the Argentine Delegate.

Voting resulted in 7 affirmatives and 7 negatives.

The **Chairman** drew attention to Article 58 (c) of the Statutes, which said "where the voting for and against is evenly divided, the President of the Conference shall be empowered to make a decision, except in the case of elections".

He added that he did not think that this article, which was applicable to sittings of the Conference, could be applied in this case.

Captain Luymes (Netherlands) suggested that the decision should be left to the Conference itself.

The **Chairman** opened the discussion on paragraph 3 :

"On the largest scale chart affected, the year date of the wreck will also be inserted, when known. On small scale charts, the word 'wreck' will be omitted".

The **Chairman** observed that, in his opinion, numerous notations on the charts upset the clearness of the charts themselves. He asked if it was really necessary to know if a ship sank in any particular year.

Commander Haselfoot (Great Britain) observed that, on very large scale charts, there would not be many wrecks shown; there might be one or two on each sheet, at the most. This indication of date would not then encumber the charts, and on the other hand, it might be interesting to mariners to know the date; they might wish to examine the wreck more closely, in order to give fresh information on its condition.

Lieutenant-Commander Golemis (Greece) suggested adding the following words, in order to complete the first sentence of paragraph 3 "if the clearness of the charts does not suffer thereby".

Captain Luymes (Netherlands) could not see what interest mariners could have in knowing the date of the shipwreck. Whether it took place in 1897, or in 1924, the navigator would have to avoid the wreck with the same care, because it was inserted on the charts. On the other hand, with his experience Captain Luymes did not think that the Merchant Marine worried itself much about giving additional information on such and such a wreck. Merchant Service sailors considered with reason that this was the task of Hydrographers and not theirs.

Mr. Richards (Egypt) asked if the first paragraph could be completed, by adding the words: "in so far as the clearness of the chart is not affected by it".

The Chairman first put to the vote the first sentence of paragraph 3, with the addition proposed by Lieutenant-Commander Golemis "if the clearness of the charts does not suffer thereby".

This text was adopted by 10 votes to 4.

The following Delegations replied in the affirmative:

China - Japan - Egypt - Great Britain - Germany - France - Greece - Argentine - Portugal - Spain.

The following Delegations replied in the negative:

Denmark - Sweden - Netherlands - Italy.

The Chairman said that the second sentence of paragraph 3 had been deleted, the Committee having just decided not to insert the word "wreck".

He added that the Greek Delegate proposed that the symbol already adopted for wrecks, instead of being marked by a continuous line, should be marked by a dotted one.

Lieutenant-Commander Golemis (Greece) justified this proposal by saying that it was more convenient to indicate thus the existence of a wreck below the surface of the sea.

The Chairman observed that a symbol drawn with a continuous line had already been adopted for submerged rocks. He was nevertheless disposed to put the Greek Delegate's proposal to the vote.

Lieutenant-Commander Golemis (Greece) wished to know, before voting, the opinion of the British Delegate, in connection with this proposal, which was really an amendment of the British proposal.

The Chairman considered this unnecessary, the proposal which had been adopted by the Committee not having emanated from Great Britain, but from the Netherlands Delegation.

Commander Haselfoot (Great Britain) considered it useless to give his opinion, as it would only prolong the discussion. A symbol was adopted in 1919; the British Delegate therefore saw no necessity to modify it.

The Chairman put to the vote the proposal of the Greek Delegation.

The proposal was unanimously rejected, except by the Greek Delegation.

The Chairman put to the vote the following paragraph:

4. "On the smaller scale charts, wrecks will not invariably be shown in the waters covered by larger scales. When necessary, a note to this effect will be inserted on the chart."

The Chairman made a reservation with regard to the second sentence. It was essential that as few names as possible be put on charts, as this information should be given for preference in Sailing Directions.

Commander Benitez (Spain) asked for some explanation on the subject of this sentence, which he did not quite understand.

Commander Haselfoot (Great Britain) said that for the sake of greater clearness on the chart, the British Delegation thought that wrecks should not be shown on small scale charts, but that, where they were omitted, this omis-

sion should be mentioned under the title of the chart. Nevertheless, wrecks which were a danger to navigation should be shown on all charts.

The **Chairman** proposed to add, after the first sentence, the words: "except in cases where they constitute a danger to navigation".

He added that in the first sentence of paragraph 4, the word "never" should be altered to "not invariably".

Paragraph 4 thus modified *was adopted unanimously* with one abstention (Japan).

The **Chairman** opened the discussion on paragraph 5:

"Doubtful wrecks will be marked on large scale charts with the note 'E. D.', 'P. D.' or 'P. A.', signifying: "Existence Doubtful", "Position Doubtful", and "Position Approximate", as necessary, in order to differentiate them from wrecks the particulars of which are authentically known".

This text was adopted.

M. Zacharias (Germany) observed that "Position Doubtful" or "Position Approximate" meant almost the same thing, and that the same term could be used for both, *i. e.* "Position Approximate".

The **Chairman** replied that "Position Doubtful" was used when one had no precise information but supposed a wreck to exist on that spot; and that "Position Approximate", on the contrary, was used, to point out the position of a wreck which had not been determined with exactitude.

Captain Hooykaas (Netherlands) said that "P. D." and "P. A." were not at all the same thing, because "P. A." signified that the danger point was better known and much more exact than that of "P. D." "P. D." meant that there was a danger somewhere about.

The **Chairman** was of the opinion that no difference need be made between "P. D." and "P. A.", and that they should be replaced by the single notation "P. A.".

Commander Haselfoot (Great Britain) remarked that there was, nevertheless, a great difference between the notations "P. D." and "P. A.". According to him, "P. A.", position approximate, meant that there might be a slight error of a mile perhaps, it was therefore an almost accurate indication. With "P. D.", on the contrary, the margin of error might be much larger, sometimes 5 or 6 miles.

The **Chairman** remarked that Paragraph 5 was already adopted, but that there was a modification proposed by the German Delegate. This new proposal was to unite the two notations "P. D." and "P. A." into the single abbreviation "P. A." He put this proposal to the vote.

The proposal was not adopted.

The **Chairman** opened the discussion on the last paragraph:

6. "The position of the centre of the wreck is indicated in the case of 2 (a) by a small circle on the water line at the base of the mast; in the cases of 2 (b) and 2 (c) by the intersection of the horizontal line and the middle vertical line, whilst in the cases of 2 (d) and 2 (e) it is the centre of the dotted circle".

This paragraph was adopted

E) DEPTH CONTOURS.

The **Chairman** remarked that there were numerous proposals on this subject, some by States Members, others by the Bureau.

He proposed first to deal with the question of principle. The Bureau, had established symbols for danger lines up to a depth of 10 metres, with a symbol for each metre, then for every 5 metres up to 50, then from 50

to 100, and finally for every 100 metres*. This necessitated a very large number of symbols and the Chairman asked the Committee if it would not be preferable to settle on a certain number of lines, but not all, so as not to make the number of symbols too great.

Captain Hooykaas (Netherlands) considered that these proposals were not very clear. Depth contours and danger lines, he said, must be entirely distinct from one another. Great Britain said, in the explanatory note. "The object of contour lines is to inform the navigator when he is entering depths which may be dangerous ; they are in fact danger lines". Contour lines, said Captain Hooykaas are *not* danger lines, but are intended to facilitate the reading of the chart. Only in some particular cases are these lines meant as danger lines.

Captain Hori (Japan) understood the above proposed to have been brought forward by the Bureau.

The **Chairman** replied that that was so.

Captain Hooykaas (Netherlands) feared that there was some misunderstanding. In order to dissipate this, he pointed out that if the Bureau proposed to adopt lines for every metre, it did not say that all the lines would necessarily be used. Those only would be used that were considered useful, but if it were desired to show a definite depth, the Bureau's line for this depth would be used.

The **Chairman** said that that was the exact meaning which should given to his proposal concerning the question of principle.

He then put this question of principle to the vote.

Adopted by 10 votes to 4, with one abstention.

The following Delegations replied *Yes* :

China - Japan - British India - Denmark - France - Greece - Argentine - Netherlands - Portugal - Spain.

The following Delegations replied *No* :

Italy - Germany - Great Britain - Egypt.
Sweden abstained.

(*)SYSTEM PROPOSED BY THE BUREAU

METRES

1	.....	or general danger line
2	.. .. .
3	... ..
4	.... ..
5	— — — — —	
6	- - - - -	
7	- - - - -	
8	- - - - -	
9	- - - - -	
10	— — — — —	distinctly longer than the dashes of 5 metres.
15	— — — — —	
20	— — — — —	
30	— — — — —	
40	— — — — —	
50	— — — — —	
or	----- 50 -----	} any form of lines with figures at suitable intervals.
100	----- 100 -----	
200	----- 200 -----	
300	----- 300 -----	
	etc....	

The **Chairman** opened the discussion on the symbols used for depth contours. He remarked that the Netherlands Delegate pointed out that a special sign for the *general danger line* would be necessary, and then observed that the Bureau on the other hand said :—

2.— No objection can be made to a general danger line, especially to enclose a part of the sea which ships should avoid altogether, on account of the great number of obstructions to navigation. Some nations have already accepted for this symbol a simple dotted line, similar to the contour of 1 metre because mistaking the former for the latter is not probable and, should this happen, would not involve danger.

The **Chairman** then asked the Netherlands Delegate if he saw any difficulty in accepting as the general danger line that of one metre.

Captain Hooykaas (Netherlands) thought that in the line shown for 1 metre, the distance between the dots was rather too great. Around small islands, such a line would not be very legible. The danger line used by the British Admiralty was very preferable.

The **Chairman** said that he would cause to be circulated a table showing the depth contours as adopted by various States and at the same time a proposal from the Portuguese Delegation, another from the French Delegation and a third from the German Delegation. The discussion on this subject could then be postponed to the afternoon sitting.

He read out the Portuguese proposal as follows :—

"Portugal finds it necessary to define depth contours up to over 1000 metres, because along her coasts there are to be found deeps with depths greater than 1000 metres. Should any objection be entertained to introducing figures into depth contours, because this might encumber the charts to a greater extent and give rise, perhaps, to errors when reading them, the Portuguese Delegation submits for the approval of the Committee a list of Depth Contours, which is founded partly on the Bureau's proposal".

Commodore Reinius (Sweden) thought that it would be impossible to agree on a list applicable to all countries. He thought it preferable that each country should adopt such depth contours that might seem best suited to their own needs. He said that Sweden, Norway, Denmark and Finland had already agreed on this subject.

The **Chairman** thought that in order to arrive at the unification of charts, depth contours and symbols should also be unified. Of course, a country might prefer a special line to denote such and such a depth, but the principle of one single symbol should be adopted by all countries. The **Chairman** did not see why it was impossible to come to agreement on a symbol to be adopted for each contour.

Commodore Reinius (Sweden) did not think that all countries could use the same line to indicate the same depth. If, for example, Italy and Sweden both wished to indicate the 5 metres line, they could not use the same symbol because of the different nature of their coasts.

Lieutenant-Commander Monti (Argentine) thought, nevertheless, that it was desirable to unify all lines by one system of symbols.

Captain Hori (Japan) wished that a good many lines for the various depths could be adopted, leaving each State the right to choose to which depths these lines should be applicable.

The **Chairman** repeated that it would be desirable to see all countries using the same symbols to define the same depths. He then said that the proposal adopted by the Committee would of course not be binding, each State having the liberty to choose whatever line it might find preferable. Mean-

while, the Committee should point out that it was desirable that States should utilise the symbols put forward by the Conference.

Commander Haselfoot (Great Britain) said that, the British Hydrographic Department having no intention of adopting the metric system, the British Delegation would make no observations concerning the lines proposed for depths in metres. The British Hydrographic Department would keep to its present system of depths in fathoms.

Lieutenant-Commander Chen (China) said that his country at present showed depths in feet, and used the same symbols as the British Hydrographic Department. If in the future his country decided to use metres, it would adopt the symbols which had been settled by the I. H. B.

The **Chairman**, considering that time must be given to the Delegates to examine the different proposals made concerning the symbols to be used, said that the discussion would be proceeded with later.

He proposed to proceed now to :

3. COLOUR OF LIGHT SECTORS.

Sweden proposes that :

" those Hydrographic Services which do not at present, for some reason or another, colour the light sectors on their charts, should consider the possibility of introducing the said method of representation on charts of larger scales, at least for passages of importance in which navigation is difficult ".

The **Chairman** opened the discussion on this proposal.

Commodore Reinius (Sweden) thought that the I. H. B. has misunderstood the Swedish proposal. It was quite true, he said, that it had been decided in London that countries who can use coloured sectors are invited to do so, but what Sweden now proposed was that Hydrographic Offices which did not do so, should consider the possibility of using coloured sectors for the most important points, such as entrances to harbours, channels, etc...

Lieutenant-Commander Lopes (Portugal) observed that this question was made the subject of Circular-Letter No 15 H of 1923 of the Bureau, and that in the Report on the Work done by the Bureau, page 21, might be seen the following " Except Portugal, which could not agree, the proposals were accepted by the States Members as to colours of light sectors ".

The same remark having been made at the Committee on the Work of the Bureau, at its sitting on the 28th of October, at which the Portuguese Delegate, being occupied on the Charts Committee, was unable to be present, **Lieutenant-Commander Lopes** wished to point out that there was a misunderstanding, because Portugal, in her letter 175-B of the 20th July 1923 addressed to the I. H. B., accepted the Bureau's proposal.

Captain Hooykaas (Netherlands) pointed out that this was rather a difficult question, because it would not be easy to keep these charts up to date, if there were frequent changes in the lights.

The **Chairman** agreed with this view. He said that, as charts were not continually replaced, they should be corrected more frequently, which, owing to their colouring, would be more difficult to carry out when changes occurred in the characteristics of lights or light sectors.

Meanwhile, the Bureau had said : " that those States which can do so shall use colour on their charts, to indicate the colours of the sectors of lights, as this method is practically perfect. "

It would be seen, he said, that the Bureau had merely expressed an opinion.

Commodore Reinius (Sweden) proposed a slightly different wording. He suggested saying " it is desirable that those States which can do so.. ".

Commander Haselfoot (Great Britain) said that for financial reasons and also because it would be difficult to keep charts up to date, the British Admiralty would not put colour on its charts.

Commodore Reinius (Sweden) again modified his proposal. He suggested the following text :

" It is desirable that those States which do not colour the Light Sectors on their charts, should publish special charts with the light sectors coloured for at least channels of great importance and in which navigation is difficult ".

This text was put to the vote and rejected by 10 votes to 4, with one abstention.

The following Delegations replied *Yes* :

Japan - Germany - Sweden - Denmark.

The following Delegations replied *No* :

Egypt - Great Britain - France - Greece - Argentine - Netherlands - Portugal - Spain - Italy.

China abstained.

The **Chairman** put to the vote the following text :

" It is desirable that those States which are able to, should colour their charts in order to indicate the colours of light sectors, considering that this method is practically perfect ".

This text was unanimously adopted, less one abstention (that of the Delegation of British India).

The sitting adjourned at 1150.

E) DEPTH CONTOURS. (cont.)

On resuming, the **Chairman** opened the discussion on the proposals of the Bureau, and of the French, Portuguese, and German Delegations. He considered the proposal brought forward by Germany not very precise.

Commander Bouveng (Sweden) thought that the Committee could not pronounce at once in favour of one or other of these proposals, because the Delegates had not had sufficient time to study them. The best solution would be, in his opinion, to leave this question for the examination of the Bureau, which, after deep study of the various proposals, would draw up new conclusions later on.

Captain Kavamura (Japan) agreed with this suggestion.

M. de Vanssay (France) approved of the proposal to leave this question to the Bureau. This study, by the Bureau, would be much facilitated if the Conference decided that it preferred, for the 5 metre line, thick dashes or dots. It would be a good thing if the Committee could pronounce on the subject.

The **Chairman** put to the vote the following proposal as to referring to the Bureau the question of Depth Contours :

" owing to the different proposals made by the Bureau, France, Portugal and Germany, the Committee proposes that the Bureau be requested to carry out a new examination of the question and to submit new proposals to the States Members ".

This proposal was unanimously adopted.

The **Chairman** then invited the Committee to decide in favour of one of the three lines suggested, viz.

— — — — —

.

.....

The Delegations of Egypt, France, Argentine, the Netherlands, voted in favour of the first line.

The Delegations of Italy and Portugal voted in favour of the third line.

No Delegations was in favour of the second.

The Chairman asked those Delegations who had abstained from voting to say what kind of line they preferred.

Lieutenant-Commander Golemis (Greece) proposed the following line :

The Chairman suggested that the Bureau be informed that the Committee thought that the 5 metre line should be heavier than the others.

Several Delegates considered that this line should be simpler than the others, because it was the most important.

This recommendation should be referred to the Bureau.

GENERAL DANGER LINE.

The Chairman asked the Committee if it considered that there should be a line representing the general danger limit, or if it were sufficient that it should be one of the depth contours.

Commander Benitez (Spain) recalled that the Committee had already chosen a continuous dotted line as a danger line for marking rocks. If the Committee decided not to have a special danger line, the Bureau would be obliged to take the dotted line as a depth contour.

The Chairman proposed calling this line "coast contour line" instead of "general danger line". It was really a question of defining the limit at which ships should stop in order to avoid all danger.

M. de Vanssay (France) asked if any Delegation had proposed a special line for the general danger line.

The Chairman replied in the negative.

Captain Luymes (Netherlands) thought it would be better not to have a special line.

M. de Vanssay (France) said that the one metre line was used on a large number of charts.

Lieutenant-Commander Monti (Argentine) thought it was not necessary to create a danger line, considering that depth contours already existed. Each ship should choose the depth contour which was most suitable to herself.

The British and Swedish Delegates agreed with this.

Commander Bouveng (Sweden) added that it was not possible to have a danger line at a fixed depth, for the depth could vary according to the nature of the waters.

M. de Vanssay (France) also agreed with these observations. The danger line could not be at the same time a depth contour. In most cases the danger line did not really correspond of that of a certain contour. The French Delegate would prefer to keep to the term "general danger line" rather than adopt the expression "coast contour line".

The Committee decided to adopt the term "*general danger line*".

M. de Vanssay (France) further pointed out that for a great many charts, a danger line was used which was not that of a definite depth and which was formed by a series of small continuous dots. This sort of line on many charts was also used for the one metre line. It had been thought that there was really no objection to having two lines at the same time when there was no risk of confusion. There was, therefore, no special symbol for the danger line.

The **Chairman** urged that if the one metre line were adopted it would be a depth contour line.

M. de Vanssay (France) observed that if a danger line were established, it would not mean that there was a metre everywhere.

Commander Benitez (Spain) thought that the line formed of continuous small dots, which would be seen in the Table prepared by the Bureau, was not very correct because the dots were too far apart.

The **Chairman** said that as far as he was concerned he saw no necessity for this danger line, because the depth contour was sufficient.

M. de Vanssay (France) proposed that the comment of the Bureau, be adopted, as far as the question of the danger line was concerned, on condition however, that the dots were placed slightly nearer to one another than in the sketch.

COMMENT OF THE BUREAU

"No objection can be made to a general danger line, especially to enclose a part of the sea which ships should avoid altogether, on account of the great number of obstructions to navigation. Some nations have already accepted for this symbol a simple dotted line, similar to the contour of 1 metre because mistaking the former for the latter is not probable and, should this happen, would not involve danger".

This proposal was put to the vote.

The following Delegations voted in *favour* : China - Denmark - Japan - British India - Egypt - Great Britain - France - Netherlands - Portugal - Spain.

The following Delegations voted *against* :

Sweden - Greece - Italy - Germany - Argentine.

The proposal was therefore adopted by 10 votes to 5.

Paragraph 4.

"4.— It is possible to differentiate the lines from 10 to 50 metres from those of 5 to 9 meters. The long dashes of the contour of 10 metres are notably different from the 5 m. line with a line of dots, and the dots of the others could be replaced by short dashes between the longer ones."

The **Chairman** saw no necessity to open discussion on this paragraph, as it had been decided that this question should be referred to the Bureau for examination.

(No observations on the subject).

Paragraph 5.

5.— It is improbable that numerals in different and bigger figures than the soundings against the contours of depths would be mistaken for soundings. But, even of this mistake were made, no harm whatever would be done because it is very probable that the depth expressed will be found on or very near these contours. Even for the contour of 50 m. this would meet with no objection."

The **Chairman** opened the discussion on paragraph 5. He invited the Committee to decide as to the suitability of placing figures on the lines.

M. de Vanssay (France) did not approve of putting figures on the depth contour lines for the following reasons:

1, the appearance of the charts would be rather inartistic, because usually numbers indicating depth were inscribed horizontally; if placed on the lines, these figures would lie in all directions.

2, this was a question of principle: it had always been admitted, at least for French Charts, that the numbers shown corresponded to a sounding which had been actually taken. The above proposal would on the contrary necessitate the insertion of soundings which had not been taken.

The **Chairman** put to the vote the proposal that the figure be inserted on the line.

The following Delegations voted in *favour* :

Germany - Sweden - Denmark.

The following Delegations voted *against* :

China - British India - Egypt - Great Britain - France - Netherlands - Portugal - Spain - Italy.

Japan, Greece and Argentine *abstained*.

The Committee therefore decided by 9 votes to 3, with three abstentions, not to insert any number on the lines.

Paragraph 6.

" 6.— There appears to be no necessity to give special contours for every difference of 1 m. of depth between 10 and 50 metres."

The **Chairman** put to the vote the question as to whether the Committee considered it necessary to establish a special line for every metre of depth between 10 and 50 metres.

The following Delegations voted: *Yes*.

China and France.

The following Delegations voted: *No*.

Japan - British India - Egypt - Germany - Sweden - Denmark - Greece - Argentine - Netherlands - Portugal - Spain - Italy - Yugo-Slavia.

Great Britain abstained from voting.

The Committee decided therefore by 13 votes to 2, with one abstention, that it was not necessary to have a special line for every metre of depth between 10 and 50 metres.

Paragraph 7.

" 7.— The 3 m. line is of no use to ships. It has some importance for small craft only, the greater number of which are locally acquainted and do not need charts. Its conspicuousness diminishes the legibility of the charts and must be a great impediment to correction of copper plates; besides it is prejudicial to a general good appearance of the chart."

The **Chairman** said that, as the Committee had admitted the principle that each country should establish those lines which were most convenient to them, it was not necessary to vote whether a 3 metre line was desirable or not.

(Approved).

Paragraph 8.

" 8.— There is no objection to the insertion of dotted lines for 0.5 metre between the others, but it is not advisable to prescribe this procedure and it should be applied only where it is absolutely required."

The Committee unanimously approved the comment of the Bureau.

Captain Hooykaas (Netherlands) suggested that the Committee should point out to the Bureau that it was desirable that the 200 metres and the 100 fathom lines should stand out more clearly than on the table, for these contour lines were important from a geological point of view. The speaker preferred the British 100 fathom line.

This proposal was approved.

The Committee also decided to take note of the Comment of the Bureau on the British proposal.

The Committee then went on to the examination of the British proposal as follows :

" A more convenient symbol be adopted for the 6 fathom line which, in its present form, is cumbersome and difficult to delineate ".

COMMENT OF THE BUREAU.

The British symbol, and that of the U. S. of America, for the 6 fathom line is --- -- -- -- --.

Since these are the only nations which use this fathom line, JAPAN and the EAST INDIAN ARCHIPELAGO having adopted the metric system, and ARGENTINE not using this fathom line, it appears to be indicated that the two nations should come to a direct understanding between themselves.

PROPOSAL OF THE GERMAN DELEGATION CONCERNING WIRELESS STATIONS (cont.).

The Chairman asked the Delegates if they had had sufficient time properly to consider the German proposal concerning symbols for wireless stations; and whether the discussion could take place immediately, or if they would prefer that it should be postponed till to-morrow.

Commander Haselfoot (Great Britain) thought that the Committee, before going into the details of the question, should first vote on the following question of principle :

" Is it of advantage to augment indefinitely the number of symbols on a chart ? "

As science progressed, he said, new symbols would have to be added to those already existing, and at least twenty more would be required if a different symbol were adopted for every kind of wireless station. Charts would thus become quite illegible to the ordinary navigator. He was of opinion that all information concerning telegraphic stations should not be shown on the charts but should be kept in the Wireless Office. It was the wireless operator who should give the Captain the information that he had been able to obtain, and it was to him that the Captain should apply when he desired this information.

The British Delegate proposed that a system for wireless stations similar to that for Lights should be adopted, that is to say one single symbol, next to which would be inserted a few letters giving the necessary information as to the nature of the station.

M. de Vanssay (France) made the following declaration :

" The French Delegation considers that the symbol at present used for wireless stations is not absolutely satisfactory.

" On the other hand, the use of wireless signals is still likely to undergo many changes. If it is desired to create new signs and foresee every possible case, there is a risk of having to modify them again, which would be very inconvenient ".

The French Delegation also pointed out that, in cases already numerous and which would doubtless become more so, wireless signals were made from the same place as lights. It would be difficult to superimpose a new symbol or a new colour on the symbol and colour already used for lights.

The Delegation proposed therefore that the position of wireless stations should simply be indicated by a position circle accompanied by the letter *R*. This letter could be followed, similarly to the letters *F* or *L* of lights, by information as to the method of signalling which would be learnt by experience and which it seemed premature to lay down at present.

Commander Haselfoot (Great Britain) suggested that if a single symbol were to be adopted, it should be the one referred to in "*Proposals*", under letter (a) i. e. the circle with a cross.



In his opinion, the nature of the station could be shown by placing a few initials at the side of the symbol. If the *wireless station* were situated at the same place as one showing lights, both stations, namely the light and the *wireless station*, might easily be combined and yet remain quite distinct.

Captain Hooykaas (Netherlands) thought that new symbols might result in the disfiguration of the chart and might render it less legible. He was therefore in agreement with the French proposal.

The **Chairman** closed the discussion.

He asked the Delegations to decide on the proposal of adopting one single symbol. All the Delegations present, except that of Germany, were in favour of this proposal.

(Adopted).

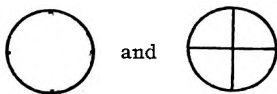
The **Chairman** said that charts should be made as simple as possible.

M. de Vanssay (France) agreed with the Chairman's remark and said that for lights, one single symbol had always been given, although there were many kinds of lights.

Commander Haselfoot (Great Britain) expressed the opinion that the whole Conference should express its gratitude for the heavy task undertaken by the German Delegation in drawing up the List proposed by them, a list which would prove most useful when the classification and terminology for the designation of all wireless stations came to be settled.

All Delegations associated themselves with this.

The **Chairman** said that the Committee should decide between the symbol proposed by the French Delegation and that proposed by the British Delegation.



M. de Vanssay (France) drew attention to the object of the symbol proposed by the French Delegation: this symbol was meant to avoid the introduction of a new one.

Commander Haselfoot (Great Britain) pointed out that with the French symbol, the exact situation of the wireless station was not shown.

M. de Vanssay (France) replied that the centre of a little circle seemed a sufficiently definite thing to him.

The **Chairman** put to the vote the symbols proposed by the French and British Delegations.

The French symbol received 6 votes.

The British symbol received 10 votes.

The British symbol was consequently adopted.

Mr. Richards (Egypt) observed that the British proposal was really the first of the three symbols proposed by the Bureau.

The Chairman proposed that the letters to indicate the types of wireless stations should be decided on.

Lieutenant-Commander Monti (Argentine) said that the question of languages arose here.

M. de Vanssay (France) proposed that the single letter *R* should be adopted, as being sufficiently significant. He saw no necessity for this letter to be followed by others and asked that this proposal should be voted upon.

The Chairman feared that the letter *R* was not precise enough to show whether a wireless or a wireless direction-finding station was indicated. If it were very important for the captain of a ship to know that a wireless station was to be found in a certain place, it was equally important for him to know whether a Direction-Finding station existed also.

M. de Vanssay (France) pointed out that the same question arose for all lights for which one single letter was generally used with a description in small print. He would like the letter *R* with a description to be adopted.

Commander Haselfoot (Great Britain) thought that it was superfluous to use the letter *R*, in the same way as it was considered superfluous, that morning, to use the word "wreck" at the side of symbols denoting wrecks.

The Chairman remarked that this was a different matter. For lights, a triangle was used, but with the letter "*F*" to show that a light was meant. It would be best to put the letter "*R*" followed by some other letter to be chosen, in order that the navigator might have immediate information.

He asked the Committee to decide as to the use of the letter "*R*", as a first letter, to indicate wireless stations.

This proposal was unanimously adopted.

The Chairman opened the discussion on the question of what else should follow letter "*R*".

M. de Vanssay (France) proposed that this should be left to the initiative of each country.

The Chairman put the last proposal to the vote.

Adopted by all Delegations with the exception of those of Greece and Italy.

The Chairman opened the discussion on the sentence on page 8 of "*Proposals*" (French text) as follows:

"the symbol might be coloured in violet".

Lieutenant-Commander Monti (Argentine) thought that as the matter had been so much simplified, the colouring in violet was necessary.

Commander Haselfoot (Great Britain) asked how this colouring would be carried out; if by means of a plate, it would entail expense that the British Delegation could not consider.

M. de Vanssay (France) recalled that he had already pointed out that wireless stations were often situated at the same place as lights, and that the latter were indicated by colour. He asked how it would be possible to superimpose the violet.

Lieutenant-Commander Lopes (Portugal) was in agreement.

Lieutenant-Commander Monti (Argentine) did not agree with the French point of view, because in his country there were certain wireless stations which were at a great distance from lights.

Commander Bouveng (Sweden) proposed that the letter should be underlined in violet.

The **Chairman** said that with a view to the simplification of charts, it would be preferable to colour neither the letters nor the symbols, and that it would be enough to insert the letter "R" accompanied by a symbol showing the kind of station. He made reservation as to the adoption by his country of any signal which would need colouring.

All Delegations were in agreement with the Chairman's remarks, except those of Sweden, Greece and Denmark.

Consequently, the Committee decided that neither symbols nor letters should be coloured.

4. REFERENCE TO ADJOINING CHARTS.

The **Chairman** put into discussion the British proposal that :

"a system be adopted by which the Chart numbers of the adjoining sheets are shown in the appropriate positions or, in case of complex arrangement, a skeleton index should be given".

Lieutenant-Commander Monti (Argentine), as he did not quite understand this proposal, asked to see a chart as an example.

Lieutenant-Commander Chordasich (Yugo-Slavia) said that in his country the system as proposed by Great Britain was used.

The **Chairman** : "In Italy also".

Commander Haselfoot (Great Britain) to satisfy the Delegate of the Argentine, illustrated the proposal by means of a drawing on the blackboard.

The British proposal consisted of putting, in the margin of each of these charts, an indication of the adjoining charts on the next larger or smaller scale, as the case might be.

In the margin would be shown a note such as for example "See chart N° 1837, nat. scale 1/25,000".

In certain regions, there was a series of charts arranged as he pointed out in his drawing.

It was proposed that in such a case, a small sketch should be inserted in the margin of the chart showing the grouping of the adjoining charts, and on which the actual chart would be shaded to distinguish it from the others.

The **Chairman** was of opinion that without giving a general rule, the principle might be established that it would be desirable that each State should have, in this case, either an index or an indication of the numbers of larger scale charts than the one concerned or others adjoining.

Lieutenant-Commander Golemis (Greece) asked for an explanation. If the adjoining charts were on a smaller and not on a larger scale, what would be the situation?

The **Chairman** replied that there was difficulty in making general rules, because the zones varied according to the surveys to be made. It was impossible to say; a definite rule could not be laid down. The principle to be adopted was that it was useful to have, on a chart of a certain scale, an index, or else a reference to a certain number of charts which were of a larger scale.

Captain Hooykaas (Netherlands) thought that if a chart index were given, all charts of every kind referring to the district could be shown therein. If, on the contrary, only marginal notes were given, only those charts which were of the same scale as the chart concerned could be mentioned, or at any rate, those of very nearly the same scale.

Commander Haselfoot (Great Britain) said that he had shown his first method of mentioning adjoining charts by marginal notes, only for cases where

there was not sufficient room on the chart to insert the skeleton index. This index might take up much space and be difficult to put on charts already full up; The British charts of the Red Sea were examples.

The **Chairman** said that the best solution was to keep to the marginal note where it was not possible to put in a skeleton index.

The proposal was put to the vote and adopted.

5. STANDARDISATION OF TITLES OF CHARTS.

The **Chairman** brought up the following for discussion.

Great Britain proposes :

- (a) " that a general discussion on the information to be included in the title should take place ;
- (b) " that the names of Officers responsible for surveys should be deleted when they become too numerous for showing on the chart ;
- (c) " that magnetic variation should be omitted from the title, when it is shown against the compass rose ;
- (d) " that conspicuous objects should be enumerated ".

SWEDEN proposes that

" every non-English chart should give, in the title, the English version of

- " (e) Geographical limits or name of chart,
- " (f) Projection } need generally not be translated,
- " (g) Scale }
- " (h) Unit of measure of depths and heights with level of reduction,
- " (i) Authority : Date of survey, alien charts used. "

and read out the Comment of the Bureau. as far as " geographical positions ".(*)

(*) COMMENT OF THE BUREAU.

The information to be included in the title was laid down at the London Conference in Resolution R of Section I, (page 29 of Proceedings), which runs as follows :

" It is agreed that the date or dates of surveys should always be inserted on the larger scale charts for the information of the user, and further that there should be a legend given showing the official sources of the information and the names of officers and ships who have executed the survey or surveys, as desired by the country concerned.

" LIST OF ABBREVIATIONS. — It is agreed that a list of the abbreviations used on the chart and their equivalents should always be given.

" SOUNDINGS. — It is agreed that the unit of measurement of depths should be given in a conspicuous position and in a distinctive character.

" POSITION. — It is agreed that a position by Latitude and Longitude should always be given on an ungraduated plan, and on a graduated plan of a large scale."

The discussion on this Resolution (page 105 par. 11. to page 107 par. 21 of the Proceedings) shows :

that there was a general consensus of opinion as to mentioning the scale, the official sources of information and a geographical position ;

that one nation only questioned the necessity of mentioning the date of the surveys ;

that various Delegates wished to leave to each country the decision whether the names of ships and officers who have made the survey should be mentioned ;

that one nation, which invariably uses the metre, did not think it necessary to mention the unit of measurement of depths, and

that mentioning the symbols and abbreviations used on the charts was advocated by some Delegates.

Therefore the reopening of the discussion on (a) does not appear to be urgently required ; as to (b) and (c), each nation is free to do as best suits it.

The enumeration of conspicuous objects (d) may be useful on large scale charts and plans, but cannot be recommended for small scale charts and every nation should be left free to do this at its own convenience.

As to the insertion of English translations in the title of charts, the Bureau is of opinion that this is always required for (h) and (i), but will be required for the name (e) and projection (f), only when the chart of a nation uses other than Roman characters.

If there be space in the title, a short list of abbreviations used on the chart in the national and English languages will be useful.

No one having any remarks to make, the **Chairman** declared the *text adopted*. **Captain Hooykaas** (Netherlands) recalled that this proposal had been adopted in London.

The **Chairman** replied that this was true, but that it had been agreed that decisions taken at London might be rediscussed.

M. de Vanssay (France) observed that at the time the London Conference took place, there was a large number of charts on Mercator's projection, and plans. On the plans, he said, it was indispensable to show a geographical position, but on charts it was useless. It had been decided in London that only charts on Mercator's projection would be published. Therefore, the French Delegate wondered whether it were necessary to put the geographical position on charts,

Commander Haselfoot (Great Britain) insisted that nevertheless the geographical basis of the graduation should be put on the chart.

M. de Vanssay (France) was in agreement.

Captain Hooykaas (Netherlands) did not agree.

The **Chairman** thought that, on Mercator's charts, it might be very useful to have a few geographical positions, because sometimes bearings had to be taken, and calculations were thereby necessary. He cited the case when an observation had to be made ashore. It was then necessary to have the longitude, and that given by the chart was not sufficient.

M. de Vanssay (France) said that in the case suggested by the **Chairman**, the navigator generally used a large scale chart on which it was easy to measure with precision the geographical position from the observation point, and often to measure it with even greater precision than that with which was actually calculated.

Commander Haselfoot (Great Britain) replied that it might be assumed that if the navigator went ashore, he only took a single chart with him.

M. de Vanssay (France) remarked that geographical positions might be inserted on the charts, but that it was not essential to lay this down.

The **Chairman**, replying to a question put by Lieutenant-Commander Lopes (Portugal), said that it must be borne in mind that merchant ships did not have special charts; in such cases, it might be very useful to have geographical coordinates.

Commander Haselfoot (Great Britain) suggested that the geographical positions be given on plans and charts which were not graduated, but that on plans and charts which were graduated, references only should be given.

M. de Vanssay (France) agreed.

The **Chairman** asked those Delegations in agreement with the British proposal to raise a hand.

All the Delegations accepted the British proposal with the exception of that of Italy.

The **Chairman** then put up for discussion the following paragraph.

"that one Nation only questioned the necessity of mentioning the date of the surveys".

No one objecting, the date of the survey will be mentioned on charts.

The **Chairman** put up for discussion the following paragraph:

"that various Delegates wished to leave to each country the decision whether the names of ships and Officers who have made the survey should be mentioned".

He asked whether or not it was desirable to mention the names of ships and Officers who had made the survey, and added that the Conference had decided that each country would do as it wished in this respect.

Captain Hooykaas (Netherlands) saw only the necessity for indicating

whether the survey had been made by Members of the Hydrographic Service, or whether on the contrary, from work done by less competent persons

M. de Vanssay (France) agreed.

Lieutenant-Commander Golemis (Greece), considered that, as all countries have special Hydrographic Service symbols, did not see the necessity of saying that it was the Hydrographic Service which had made the survey.

Lieutenant-Commander Milne-Henderson (British India) said that small plans which had been made according to work the origin of which it would be useful to mention, were often to be found on charts.

Commander Haselfoot (Great Britain) thought that when certain countries reproduced each other's charts, it would be also a good thing to mention the source, namely that it was the copy of a chart published by a certain Government on a certain date.

The **Chairman** replied that that was usually done in Italy.

Commander Haselfoot (Great Britain) said he only mentioned this in passing, for this question would be brought up again in reference to Proposal 15.

The **Chairman** thought that the remark relating to the unit of measurement was unnecessary. A nation which used the metre would naturally take the metre as its unit of measurement.

M. de Vanssay (France) thought it might be useful to insert it in any case, for it was not always known whether a nation used the metre or not.

The **Chairman** put to the vote the following paragraph:

"that one Nation which invariably uses the metre did not think it necessary to mention the unit of measurement of depths".

(Adopted).

The **Chairman** put to the vote the paragraph:

"that mentioning the symbols and abbreviations used on the charts was advocated by some Delegates".

Commander Haselfoot (Great Britain) said that this question of abbreviations to be mentioned in the titles had become quite acute in the case of British charts. The number of abbreviations to be enumerated was continually augmenting, there was not enough room to put them on the charts. Consequently, the British Admiralty had recently suppressed this heading on charts and referred simply to a list of abbreviations which navigators could procure if they wished.

The **Chairman** considered that reference should be made to the special charts possessed by each country.

Commander Haselfoot (Great Britain) thought that this would be a modification of the decisions taken by the London Conference, where it had been decided that this list would be mentioned on the charts.

The **Chairman** replied that this decision was made by a few Delegates only.

Captain Hooykaas (Netherlands) asked if the British Admiralty had already decided to suppress all these indications on its charts.

Commander Haselfoot (Great Britain) replied in the affirmative. The Admiralty had considered that either a complete list should be given, or else none at all, and as there was no room for a complete list, it had been entirely suppressed.

The French and Italian Delegations declared themselves in agreement with the point of view of the British Delegation.

The **Chairman** put the question to the vote whether the list of symbols should be kept on the charts.

Lieutenant-Commander Monti (Argentine) understood the decision to mean that a list of symbols to be chosen by each country should be given on each chart as desired.

The **Chairman** put to the vote the question thus understood :

6 Delegations replied *Yes*, as follows :

Argentine - Spain - Portugal - Denmark - Greece - Sweden.

10 Delegations replied *No*, as follows :

Netherlands - France - Germany - Great Britain - Egypt - British India - Japan - China - Italy - Yugo-Slavia.

The proposal not to put symbols on the charts was approved by 10 votes to 6.

Lieutenant-Commander Monti (Argentine) said that for some time yet his country would keep these indications on its charts.

The Greek and Swedish Delegations made the same declaration concerning their countries.

The **Chairman** observed that measures voted by the Committee were not decisions but merely wishes.

Lieutenant-Commander Monti (Argentine) said that he wished to make this declaration because his country was accustomed always to carry out the instructions given by the I. H. B.

The **Chairman** put to the vote the following paragraph :

" Therefore the reopening of the discussion on (a) does not appear to be urgently required ; as to (b) and (c) each Nation is free to do as best suits it ".

As to (c) :

" that magnetic variation should be omitted from the title when it is shown against the compass rose ".

The **Chairman** considered that this was superfluous. When the magnetic variation was shown against the compass rose, it was useless to put it in the title.

The **Chairman** put to the vote the following paragraph :

" As to the insertion of English translations in the titles of charts, the Bureau is of opinion that it is always required for (h) and (i) , but will be required for the name (e) and projection (f) only when the chart of a nation uses other than Roman characters.

If there be space in the title, a short list of abbreviations used on the chart in the national and English languages will be useful ".

The **Chairman** considered that the last paragraph was unnecessary.

M. de Vanssay (France) thought that before discussing the question of translating information, as requested by Norway, it would be a good thing to insist that whenever the projection used was not Mercator's it should be mentioned on the chart.

This proposal was adopted.

Commander Haselfoot (Great Britain) suggested that the wording of paragraph (i) be completed by adding the words : " ...with their numbers ".

M. de Vanssay (France) thought that this was not always possible.

The **Chairman** suggested addition of the words : " when possible ".

Commander Haselfoot (Great Britain) accepted this.

The **Chairman** put paragraph (i) to the vote, reading as follows :

" authority, date of survey, foreign charts used, with their numbers when possible ".

(Adopted).

M. de Vanssay (France) admitted that he had not quite understood the

vote just taken on the subject of translation of titles into English. He said that the French Hydrographic Service had no intention of translating the titles of its charts into English.

Lieutenant-Commander Monti (Argentina) made the same announcement concerning his own country.

The **Chairman** observed that it was not a question of title, but of units of measurement of depths and heights and datum level.

M. de Vanssay (France) declared that the French Service had no intention whatever of translating anything.

Lieutenant-Commander Golemis (Greece) suggested that the translation should be made either into English or French.

The **Chairman** thought that, in this matter, liberty should be left to each country to act as it saw fit.

M. de Vanssay (France) asked that it might be recommended that the original title should always be printed in Roman characters, whatever the language used.

This proposal was adopted.

Captain Hooykaas (Netherlands) returned to paragraph (d) of the British proposal and said that his Delegation was opposed to any enumeration of conspicuous objects.

The **Chairman** drew attention to the Comment of the Bureau on this point (page 14) and added that in approving this Comment it was understood that conspicuous objects were almost entirely omitted from small scale charts. As for large scale charts, these conspicuous objects would be enumerated whenever possible.

Captain Hooykaas (Netherlands) could not see their use on large scale charts, having a graduation.

Commander Haselfoot (Great Britain) said that the British Admiralty used these lists of conspicuous objects for certain special information, as for example on plans of harbour entrances, or to indicate suitable objects for anchor bearings.

As the British Admiralty had already done this, the British Delegation advocated that each country should do the same if it considered it advisable, which really corresponded to the Bureau's proposal.

Captain Hooykaas (Netherlands) thought that the object of the Conference was not to leave full liberty of action, but rather to decide on a uniform procedure.

The **Chairman** considered that it would be difficult generally to impose rules which have been adopted to meet special cases. This information might be useful in certain cases and not in others. One could not always say what must or must not be done in such or such a way.

Captain Hooykaas (Netherlands) repeated that in his opinion the Delegations of the States Members had met entirely in order to study their points of view, express their opinion, listen to that of their colleagues, and draw conclusions.

The Netherlands Delegate wished to add that he quite saw the use of a view, but not an enumeration of the conspicuous objects.

The **Chairman** suggested that a vote should be taken to know whether it was desirable, as a general rule :

- (1) that conspicuous objects be mentioned on large scale plans, and
- (2) that views should appear on plans.

M. de Vanssay (France) considered views very interesting but thought there was not always room to put them on the charts. In France, as a rule, there was not sufficient space and they were hardly ever inserted.

Captain Hooykaas (Netherlands) would like, if it were considered desirable, to insert one of the above when possible, but that preference should be given to sketches rather than lists.

Commander Haselfoot (Great Britain) considered that the information to be given on charts by the insertion of views rather than lists would be a very expensive proceeding, especially as on large scale charts several views would have to be shown.

Lieutenant-Commander Lopes (Portugal) said that the Portuguese Hydrographic Office already did this, and he handed round a chart provided with views, in this manner.

M. Zacharias (Germany) said that the Hydrographic Office in his country gave this information solely in Sailing Directions, because the printing of it on the charts themselves would be too expensive.

M. Richards (Egypt) pointed out that a list was useful for the whole chart, whereas a view was correct only for the spot from which the view was taken.

Commodore Reinius (Sweden) observed that it was also very difficult to correct a view, and that it cost much less to alter a list.

The **Chairman** proposed to decide by vote whether it was desirable or not to put this information on large scale charts.

He therefore put to the vote the question whether views or conspicuous objects be inserted on the charts. Those Delegates who preferred views, thus associating themselves with the Netherlands proposal, should reply *Yes*; those preferring conspicuous objects should reply *No*.

The voting resulted as follows:

4 Delegations replied *Yes*:

Argentina - Netherlands - Yugo-Slavia and Portugal.

8 Delegations replied *No*:

China - Sweden - British India - Egypt - Denmark - Great Britain - Italy and Germany.

4 Delegations abstained from voting:

France - Spain - Japan and Greece.

The Chairman said that it was understood therefore that the Committee preferred that the list of conspicuous objects should be found on charts.

Lieutenant-Commander Golemis (Greece) said that he had abstained from voting because he considered that the Committee could not make a formal decision.

The sitting was adjourned at 1745.

CHAPTER V.

The fifth meeting of Committee "D" was held at 0910 on Thursday the 4th of November 1926, Commander C. Baldi in the Chair.

The **Chairman** considered that the Report of the forenoon sitting on November 3rd gave rise to no observations from the Delegates.

DECLARATION.

Lieutenant-Commander Chen (China) made the following declaration :

"I wish to make a few observations on the British proposal (b), relating to the standardisation and unification of titles of charts. I propose that, conforming to a custom of long standing in most countries, charts published by the Hydrographic Office, duly authorized by Government, should give the name of the Head of the Service only.

Exception might be made in the case of charts drawn up by Officers who were not members of the Hydrographic Service.

In this case, their names should appear on the chart, as had been decided at the London Conference. Even in this case, the name of the Head of the Service who took the responsibility of the correction of the chart should suffice".

The **Chairman** thought it was undesirable to reopen a discussion which had been closed yesterday, in the course of which the paragraph, which said that certain Delegates wished to leave to each country the decision as to inserting the names of the Officers who took part in the survey, was approved. If the Chinese Delegation wished to discuss this question afresh, it could do so at the Plenary Session.

6. STANDARDISATION OF DATING OF CHARTS.

The **Chairman** opened the discussion on the Netherlands proposal :

(a) "to place month and year of first publication below the bottom margin near the centre ;

(b) "month and year of a 'new edition' below the bottom margin to the right of (a) (stipulation that a new edition always renders former editions obsolete).

(c) "that "small editions", printed between the first publication and a new edition, or between two new editions, in order to fill up the stock, shall be indicated by month and year (the former in Roman numerals) in the bottom left hand corner of the sheet ;

(d) "that charts, at delivery by the issuing Hydrographic Office or by an equivalent official Institution as to correcting charts, be corrected and, as a proof thereof, be stamped with the date of delivery and the name of the said office or institution."

He observed that, in its Comments, the Bureau recommended the adoption of these proposals.

M. de Vanssay (France) referring to the Netherlands proposal, said that the French Hydrographic Service was accustomed to put the date of the first publication in the title of the chart. On the other hand, it inscribed the date of the new editions in the bottom margin as was proposed by the Netherlands.

It would appear difficult for the French Service to modify its custom as to the date.

Commander Haselfoot (Great Britain) said that the British Hydrographic Department could not consider a modification of its system of putting the dates on charts. His observation referred to (c) and (d).

The **Chairman** asked him what system he proposed.

Commander Haselfoot (Great Britain) replied that his opinion was that it should be left to each country to decide where the information in question should be inserted, and that the position of this information should not be insisted upon to too great an extent.

What was essential, he said, was that all this information *did* appear on the chart, the position mattered little. That was to say that the following must be given: 1. the date of the first edition, 2. the date of important corrections, 3. dates of corrections consequent on Notices to Mariners and of minor corrections, and 4. the date when the chart was printed. With all this information, it should not be difficult, he thought, to solve any possible question relating to the state of the chart at any date.

He requested that no discussion should take place as to the position where all this information should appear on the chart.

M. de Vanssay (France) agreed with the British Delegation.

Captain Hooykaas (Netherlands) said that he could not accept the opinion of the British Representative because the main object of the I. H. B. was to encourage uniformity in the drawing up of charts. All Hydrographic Services represented at the Conference should work towards this uniformity. It was essential to navigators that they should be able to read charts easily and to understand them at a glance. This was not the case at present, precisely because of the charts being too complicated.

The navigator should be easily able to find the date of the last edition of the chart and to know to what extent the previous edition could be used. All charts of all Hydrographic Services should have the same appearance, and the speaker regretted that certain Delegates had said that it was unlikely that their own system could possibly be altered. In this case, the Conference would be useless.

Commander Haselfoot (Great Britain) thought that it did not matter whether the information giving the date of a new edition was found to the left or to the right. The question of position was of no importance. He pointed out that the Netherlands proposals (a) and (b) were already, in fact, applied by the British Admiralty.

He explained his Admiralty's method.

The dates (month and year) of correction for the Notices to Mariners were in the bottom left hand corner, and in the top right hand corner would be found the date (in serial day of the year and year) of printing of the chart. This information was useful for identifying charts used by Ships involved in collision or stranding, and were often of value in Courts of Law.

The speaker said that a modification in the British system would be a real revolution.

By means of a sketch on the blackboard he explained the system in detail, remarking that all the information inserted on the chart, and of which he had just shown the position, was useful not only for Tribunals but also to the Hydrographic Department.

M. de Vanssay (France) replying to the Netherlands Delegate, also hoped

that, some day, uniformity in charts would become an accomplished fact. But he reminded the Committee that Hydrographic Services were not free agents, and that they had to refer to their Admiralties. He thought it might be dangerous to draw up rules too rapidly.

Captain Hooykaas (Netherlands) answered the French Delegate that it was desirable to make a combined investigation with a view to the ideal arrangement for charts.

Addressing himself to the British Delegate, he pointed out that charts should be as simple as possible, for the convenience of navigators. That was why all information which only concerned the Hydrographic Office, and had no interest for navigators, should be omitted from charts.

Lieutenant-Commander Monti (Argentine) asked if it were necessary to put on the chart the date of the first edition. It would be enough to note the exact date of publication for the information of all seamen. The present system, he said, was only necessary for the Hydrographic Office, and not for navigators.

He thought it inconvenient to put in the lower left hand corner of the British chart, the month and year of publication of the Notices to Mariners and large corrections, and in the upper right hand corner to insert the date mentioning the serial day of the year and the year. According to him this system led to confusion because it gave two dates on two distinct systems.

The **Chairman** said that all the Delegations agreed in saying that it was desirable to reach uniformity in charts. The decisions of the Bureau had not the force of law, but it seemed that all the States Members should endeavour to carry out these decisions.

He pointed out that the Committee was confronted by a question of principle (information to be put on the chart) and of form (situation of this information).

He asked the opinion of the Delegations as to whether the method to be used in standardising charts was merely one of principle, or whether it was connected with the situation in which to insert the information.

The following Delegations voted that it was a question of principle or substance :

China - Great Britain - Germany - Sweden - Denmark - France - Greece.

The following Delegations voted that it was not only a question of principle but also of form :

Egypt - Netherlands - Portugal - Italy - Argentine.

The result of the voting was therefore as follows :

For principle : 7 Delegations.

For form : 5 Delegations.

The **Chairman** announced that Section 6, paras. (a), (b), (c) and (d) were open for discussion. The Netherlands proposed in para. (a) to place month and year of first publication below the bottom margin near the centre.

M. de Vanssay (France) did not think it necessary to show the month.

Captain H. O. Ravn (Denmark) was in agreement.

Lieutenant-Commander Lopes (Portugal) thought that in some cases it might be necessary to show the month, because conditions varied very rapidly.

M. de Vanssay (France) pointed out that the date under consideration at the moment was not the date at which the survey was made, but the date of publication. He thought the date of publication might be several years later than the date of survey.

Commander Haselfoot (Great Britain) was of opinion that not only the month and year should be shown but the day of the year on which the chart became an official publication.

The Chairman said that as everybody was agreed that the year should be shown, the only question was whether the month should be shown.

A vote was taken on the question, the result of which was as follows :

In favour of inserting the month :

Egypt - China - Great Britain - Germany - Greece - Portugal.

Against inserting the month :

Sweden - Denmark - France - Italy - Argentine.

The Netherlands abstained from voting.

The Chairman asked if there was any objection to adopting para. (b) as altered:

Month and year of a "new edition" below the bottom margin to the right of (a) (Stipulation that a new edition always renders former edition obsolete).

Captain Hooykaas (Netherlands) wished to know whether the British Delegate meant that the "new edition" always rendered the former edition obsolete.

Commander Haselfoot (Great Britain) replied that this was so always. A record was kept on the chart of all the editions. If, for example, there were editions in 1922 and 1926, these two dates would be shown on the chart, so that one could read the sequence of new editions. All editions preceding were shown.

The Chairman put para. (c) to the meeting :

That "small editions", printed between the first publication and a new edition, or between two new editions, in order to fill up the stock, shall be indicated by month and year (the former in Roman numerals) in the bottom left hand corner of the sheet.

Commander Haselfoot (Great Britain) was not clear whether the indication of the printing "to fill up stock" was intended to be shown on the charts. It could not be a small edition if it was printed merely to fill up stock, because the plate was not altered.

Captain Hooykaas (Netherlands) did not understand that.

Commander Haselfoot (Great Britain) asked the Netherlands Delegate if he would explain the meaning of the words "in order to fill up stock".

The Netherlands Delegate thought that every time a chart was was reprinted, this was done "to fill up stock". In HOLLAND, this is called a "small edition" (translation of "Kleine druk") and the date of the latest print is indicated to show to what date the Notices to Mariners were engraved on the copper plate.

The British Delegate did not quite understand how the mariner was to know what Notices to Mariners had been inserted in the chart.

Mr. Richards (Egypt) considered that the argument was about a difference of definition. The whole matter rested on what was described as a "new edition". If a "new edition" was defined as a chart with no corrections whatever, even of a small kind, that came under para. (b), and para. (c) could be left out altogether.

Captain Hooykaas (Netherlands) said that was why he asked the British Delegate what the words "new edition" meant.

Commander Haselfoot (Great Britain) went on to say that by filling up stock you were not making a new edition. He presumed that was why the small edition was printed — "to fill up stock".

Captain Hooykaas (Netherlands) replied in the affirmative.

Commander Haselfoot (Great Britain) called that a reprint, because if you had 200 charts for distribution and had a demand for more, you would reprint. But he did not see the necessity of calling that a new edition or a small edition.

The **Netherlands Delegate** did not know the expression "reprint" or he would have put "reprint" instead of "small edition".

Commander Bouveng (Sweden) said the month and year for the small editions were not necessary if no correction were made in the copper plate after a new edition had been made.

The **Chairman** stated that a vote would be taken on the text as amended, that reprints printed without new corrections between the first publication and the new editions, or between the two new editions, in order to fill up the stock, should be indicated by month and year, with no new corrections.

The voting was as follows:

In favour of the amended text:

Egypt - Great Britain - China - Netherlands.

Against the amended text:

Portugal - Argentine - Greece - France - Denmark - Sweden - Italy - India.

The **Chairman** put para. (d) to the meeting:—

"that charts, at delivery by the issuing Hydrographic Office or by an equivalent official Institution as to correcting charts, be corrected and as a proof thereof, be stamped with the date of delivery and the name of the said office or institution".

The **British Delegate** asked for a discussion on this because two questions were involved; the date of printing or delivery and the date of correction of the chart.

The **Chairman** proposed, having regard to the British Delegate's remarks, to discuss para. (d).

"that charts, at delivery by the issuing Hydrographic Office or by an equivalent official Institution as to correcting charts, be corrected..."

Commander Haselfoot (Great Britain) wished to know if the words "be corrected" should be taken to mean "corrected by hand".

Captain Hooykaas (Netherlands) replied in the affirmative. The meaning was that every chart sold would show by a stamp whether it was corrected up to date or not.

Commander Haselfoot (Great Britain) explained that in Great Britain the number of the Notice to Mariners was inserted in the left hand corner of the chart. For that reason the chart was not stamped at the date of correction with a rubber stamp.

The **Italian Delegate** said that this was also done in his country.

M. de Vanssay (France) added that the same system was followed in France, but he thought the stamp might be useful.

Commander Haselfoot (Great Britain) stated that even if the last number of the Notices to Mariners were shown there was nothing to show that a later Notice to Mariners had not been issued immediately before the chart was sold. This stamp was really out of the hands of the Hydrographic Department itself because charts were sold by private firms in England. There was what was called an Admiralty Chart Agent, who was a man who made money by selling Admiralty Charts; the Admiralty lent him a staff of chart correctors so that if the stamp had to be introduced the man who would have to put it on would be the man who sold the charts and it would not be an Admiralty responsibility. The Admiralty responsibility ended with the correction of the chart up to the last Notice to Mariners received. If the chart was sold, say four days after correction, it would be stamped on the day it was sold, but that would not be an Admiralty guarantee that that chart was corrected up to date because in the meantime another Notice to Mariners might be on the way. He wished to add that the stamp should only give the date of the latest Notice to Mariners.

The **Chairman** said that the question now put forward was whether charts should be stamped with a stamp showing the date of issue by the Hydrographic Office, and that if such a stamp be used the number and date of the latest Notice to Mariners should be shown on the chart.

Captain Hooykaas (Netherlands) said the object of the proposal was that the date up to which the Hydrographic Office was responsible should be shown on the chart and, moreover, that, if the charts were sold by a private firm, the date up to which it had been corrected by them should be put on the chart.

The **Chairman** said he thought the responsibility of the Hydrographic Office ended when the chart left its Office, and he did not see how a decision could be taken as to the responsibility of the man who sold the chart.

Commander Haselfoot (Great Britain) said that the British Admiralty took responsibility for the chart until it left the Chart Agent, because, as he had said, the Agent was given a staff of men to correct the charts, and the British Admiralty guaranteed that everybody who bought a British Admiralty chart had it corrected up to the date of the latest Notice to Mariners, and the responsibility was therefore extended from the time it was printed from the plate until the time it left the Agent's hands. He quite understood that the Netherlands Delegate was anxious to have this date inserted because on his charts, and presumably on those of other countries, the dates and numbers of the Notices to Mariners were not shown, and he quite saw that if that was the case the date on which the chart left the Agent's hands should be shown.

Captain Hooykaas (Netherlands) said that in Holland the latest Notice to Mariners inserted by the Office was always shown, but he did not think it was always easy for the sailor to understand it, and moreover he thought the chart should be stamped by the private firm who corrected it. The main object of the proposal was that the chart should be corrected up to date and that this should be shown. He knew that some Hydrographic Offices did this but some did not, and the main object of their proposal was that every Hydrographic Office should correct up to date every chart that was sold.

The **Chairman** said that the proposal to be considered was the following :
"charts should be stamped with the date up to which corrections have been made (a) by the Hydrographic Service (b) by the Agent selling the chart".

Captain Hooykaas (Netherlands) said he would like to alter the proposal slightly. The main object was that charts should be corrected, not stamped.

The **Chairman** said that the motion before the Committee and about to be put to the vote was as follows :

"Charts should be brought up to date when leaving the Hydrographic Office. They should also be stamped to show the date at which they had left the Hydrographic Office, and also bear another stamp showing up to what date the Agent had corrected the charts after they had left the Hydrographic Office."

Mr. Richards (Egypt) suggested that instead of using the word "stamped" the words "indicated on the chart" should be employed. In the case of the Notices to Mariners the number was written on the chart; and since the date was known that was all that was necessary — but the number was written, not stamped.

Lieutenant-Commander Golemis (Greece) said he understood that the Hydrographic Office issued the charts up to date.

The **Chairman** said that the text as amended would be as follows :

"Charts should be brought up to date on the date at which they left the Hydrographic Office. They should show that date and also the date up to

which they were corrected by the agent after the charts had left the Hydrographic Office”.

He explained that the two questions must be considered separately. The first question was that the charts should be brought up to date up to the moment when they left the Hydrographic Office.

The proposal was carried unanimously.

Commander Bouveng (Sweden) said that the proposition should be divided into two parts—first with regard to when the charts left the Hydrographic Office, and secondly when the agent had corrected them.

The Chairman explained that the question to be voted on was that the date of the corrections by the Hydrographic Office should be shown on the charts.

The proposal was adopted unanimously.

The Chairman put the third question, *viz.* that the charts must show the date up to which they had been corrected by the agent who sold them after they had left the Hydrographic Office.

Commander Haselfoot (Great Britain) asked if the word “indicated” could be substituted for “shown” in both cases.

Approved.

For: China - Egypt - India - Great Britain - Germany - France - Greece Netherlands - Yugo-Slavia - Portugal.

Against: Argentine - Denmark - Italy - Sweden.

The Chairman announced that the discussion on original charts would take place the following morning. A note on the subject had been circulated by the French Delegate, which the other Delegates were asked kindly to consider in order to be ready to discuss it.

7. DIMENSIONS OF CHARTS.

The question of dimensions of charts would be discussed.

Great Britain proposed that:

“All countries be asked to quote the dimensions between the inner border lines of their charts so that full use can be made of the material when used for compilation purposes. This applies specially to charts and plans which are not graduated.”

Captain Hooykaas (Netherlands) said that he had remarked a little time previously, and he wished to repeat it now, that they were always trying to keep the charts as simple as possible and not to put things on them which were of no value to the seamen. That is why Holland was opposed to the proposal. Or course, if any Hydrographic Office wanted the data Holland would gladly give them. They could put them in the catalogue or they could give them on the free copy of a new publication, but he would like to observe that it was better not to put it on the charts because it was of no value to the seamen.

Commander Haselfoot (Great Britain) replied that he could not quite agree with the Representative of the Netherlands that that information was of no value to the seaman. It was particularly required by the British Navy in general, that was to say, the fleet, for one reason, *viz.* that if prints were made from copper there was a great distortion, amounting to a centimetre in a metre, or something like that. That was the reason the British Government required it. He quite agreed that for the merchant officer it was not entirely necessary, but for the Hydrographic Office it was very necessary. If the nations were going to reproduce each other's charts accuracy could not be hoped for unless that information were available, and though the Netherlands Delegate had been kind enough to state that his country would supply that information he did not think it could be expected from everybody, unless a resolution were passed in the Committee, that whenever a country produced a

new chart it would forward that information either to the Bureau or to each nation who produced such charts. The reason that Great Britain wished the information to be put on the charts was to avoid that correspondence, but he was afraid that Great Britain would have to keep those plate measurements on their charts merely to comply with the requirements of the British fleet, which required the information when anchoring in squadrons or where great accuracy on the plan was required.

The **Chairman** thought that such information might be very usefully inserted in the catalogue which would avoid having to make indications on the charts themselves. He proposed to take a vote on whether such indications should be shown on the charts.

Adopted.

For :

India - Great Britain - Egypt - Germany - Sweden - Denmark - France - Greece - Portugal - Argentine.

Against : Netherlands - Italy.

Abstention : China.

8. SEA LIMITS.

The **Chairman** read the proposal of Sweden with regard to :

"the possibility and means of showing sea limits of various kinds on specially printed charts",

and reminded the Delegates that this question had been considered by the Bureau which had published a special chart showing suggested limits, and he also recalled the suggestion made by the Bureau that it was undesirable to show such limits on the charts.

Commander Bouveng (Sweden) explained that the object of the Swedish proposal was merely to stimulate interest in the question of sea limits, and as they had now heard that the question had been taken up by the League of Nations, Sweden had decided to withdraw the proposal.

Commander Haselfoot (Great Britain) said that the question appeared to be outside the province of the International Hydrographic Conference and he would like to draw attention to Article 7 (b) of the Statutes which said :

"It shall never deal with any subject which involves questions of international policy".

The **Chairman** said that as the proposal had been withdrawn by Sweden there was no point in discussing the matter further.

9. SPECIAL INDICATION OF NEW PART ON EXCHANGE COPIES OF CORRECTED CHARTS.

He then read the proposal of the Bureau (No. 9) that :

"the new part on exchange copies of corrected charts should be specially indicated by a light red wash".

He remarked that several countries, including Italy, had already applied that suggestion.

Mr. Richards (Egypt) proposed that the wash should be light blue instead of light red for the purposes of photography.

This proposal was unanimously adopted.

10. INFORMATION CONCERNING DANGERS MARKED: "P. D.", AND "E. D."

The **Chairman** read the proposal of the United States of America :

"that a plan be carried into execution by the I. H. B. ; for the dissemination of information concerning dangers shown on charts as 'position doubtful' and 'existence doubtful'".

Commander Haselfoot (Great Britain) said that it was considered that compilation on the lines proposed would be entirely within the competence of the Bureau and would be of considerable interest and utility, particularly if historical notes were given regarding each shoal and each danger.

Lieutenant-Commander Golemis (Greece) said he thought it was not within the competence of the captains of the ships at sea to furnish that information, but it was for the Hydrographic Offices to obtain it.

The **Chairman** pointed out that there were two distinct questions with regard to how this information should be obtained, first, that it was a purely national question to be settled by each country, and secondly that such a compilation should be drawn up by the Bureau. He thought himself that it would be most useful and would ask the Committee to vote on the question. If there was no objection he would take it that it was decided that it would be for each country to settle how such information should be obtained.

This was agreed unanimously.

The **Chairman** then proposed that a vote should be taken on whether the Bureau should be requested to compile all information obtained on the subject.

Captain Hooykaas (Netherlands) said he was sorry that the United States Delegate was not present, especially as it was proposed by that country, but he took the proposal to refer specially to all wrecks and dangers on the high seas—which appertained to no special country.

Commander Haselfoot (Great Britain) said he thought the United States, were thinking of their own publication entitled "Dangers in the Pacific Ocean", which was a research with short notes on every "P. D." and "E. D." in the Pacific. He thought the United States wanted to extend that research to all the oceans, as Captain Hooykaas had just said, and to all shoals and dangers in the open sea and in unsurveyed areas.

Captain Hooykaas (Netherlands) said he had no hope whatever that merchant vessels would ever give them much information about such dangers but Great Britain evidently thought it useful, perhaps for surveying purposes, that these matters should be investigated. He asked if Great Britain thought this.

Commander Haselfoot (Great Britain) explained that he did not think merchant ships would give them much information but the idea was eventually to remove all P. D's and E. D's and, when all the information that had been obtained in the past had been assembled, surveying ships could be sent out to clear them up.

The **Chairman** said that it would be for each nation to send vessels when they thought fit. The proposal submitted was as follows:

"The Bureau is requested to draw up a list of dangers shown on the charts under P. D. or E. D. with a short historical description of each of them. Each country is requested to provide the International Hydrographic Bureau with all necessary information for the drawing up of such a list".

He wished to say that he did not know whether it would be possible for the Bureau to undertake that task as it seemed that it would be a great task to keep that list up to date.

Captain Hooykaas (Netherlands) said he understood that the proposal would only apply to dangers marked P. D. or E. D. on the high seas or along the coasts of such countries which have no Hydrographic Service, because in the waters which were within the province of some Hydrographic Service or other it was the task of that service to undertake the survey.

The **Chairman** said the proposal put forward by the United States was of quite a general character and made no distinction between various oceans.

Captain Hooykaas (Netherlands) said that he wanted to make that distinction and to amend the proposal.

The **Chairman** observed that he thought a vote had better be taken first on the general proposition as put forward by the United States and as read out previously, and if such proposal were not accepted then no vote would be necessary on the amendment suggested by the Netherlands Delegate. The Committee was asked to vote whether the Bureau should or should not be entrusted with that task.

For : Great Britain - Egypt - Germany - Denmark - France.

Against : China - Yugo-Slavia - India - Italy - Argentine - Netherlands.

Abstention : Greece.

The **Chairman** announced that as the *proposition had been negatived* it was unnecessary to put the amendment.

The meeting rose at 11 50.

CHAPTER VI.

The sixth meeting of Committee "D" was held at 0910, on Friday 5th November, 1926, Commander C. Baldi in the Chair.

The **Chairman** proposed, in order to accelerate the work, that the Charts sub-Committee should meet at 2.30 p.m. at the Oceanographic Museum, and the Documents sub-Committee at the same time at the I. H. B.

This proposal was adopted.

BRITISH PROPOSAL, DANGEROUS WRECKS.

The **Chairman** communicated the British proposal as follows :

" With reference to the decision taken by the Sub-Committee to insert all dangerous wrecks on charts, the British Delegation proposes that this decision should be modified as follows : Dangerous wrecks should appear on all appropriate charts, taking the scale into due consideration. It is evident that such wrecks cannot be inserted on very small scale charts ".

The **Chairman** opened the discussion on the proposal.

No one wishing to speak on the subject, he put the proposal to the vote.

The proposal was adopted by 14 Delegations to one, one Delegation abstaining.

II. COPPER PLATES, ENGRAVING AND REPAIR.

The **Chairman** opened the discussion on the request of the Bureau :

" The BUREAU requests that more particulars as to the subject be communicated by the States Members, especially about the methods of engraving new plates, of correcting these and of the repair of cracked plates or of those the surface of which has become very uneven. The procedure of making galvanoplastically grown copper plates would also be of interest ".

" In connection with the subject, the various methods of making transfers and the process of printing from these transfers would be highly welcome for the Review. "

Commander Haselfoot (Great Britain) would be very grateful if the British Hydrographic Department could obtain detailed information as to the process of producing copper plates by the galvanoplastic method.

All countries, he said, would be pleased to have details as to this.

Lieutenant-Commander Monti (Argentine) wished to add to the proposal.

The Argentine Delegation, he said, thought it would be desirable that all countries who employed the lithographic and zincographic systems for printing their charts, should supply the Directing Committee of the Bureau with information, as complete as possible, as to these systems, which would always be those used by Offices which cannot afford great expense.

The speaker said that he would explain to the I. H. B. the system used in the Argentine, a system which might perhaps be adopted by Hydrographic Offices who wished to make good charts, without making use of photography, but merely by installing a printing outfit, at a reasonable expenditure.

He added that in difficult cases which he had come across in using this system of printing a construction sheet, the Argentine Office had obtained 200 copies within 8 days of receipt of the original chart from the draughtsman, this period including the inspection of the chart, the corrections, and the filling in of the zinc, 3 men only being employed on the work.

The Chairman said he wished to reply to the British Delegate who had asked for information on the Italian reproduction processes.

The Italian Hydrographic Office, he said, was well ahead as to the zincographic and lithographic reproduction of charts. He would inform the Bureau, with pleasure, of the Italian procedure. The Bureau could then transmit the information to the States Members.

The Italian Hydrographic Office was simply in the testing period, with no great results, however, of the photo-galvanic engraving process. Nevertheless this process was well developed in Germany, and the Chairman said that he would hand Commander Haselfoot's request to the German Delegate.

Noticing that no one wished to speak on the subject, the Chairman concluded that *all the Delegations were in agreement* that the States Members should send the Bureau all possible information concerning the zincographic and lithographic reproduction of charts.

(Agreed).

12. ORIGINAL CHARTS.

The NETHERLANDS propose

"to promote the use of original charts by:

"(a) Energetic advancement of the standardisation of charts;

"(b) Publishing, by the I. H. B., of an international catalogue of original charts, which answer sufficiently to the accepted rules of standardisation, and an international list of signs and abbreviations for the charts mentioned in said catalogue;

"(c) Creating a system of co-operation for the arrangement of the sale of the concerned original charts, corrected up to date, in the principal harbours of the world;

"(d) Propagation among the sailors, especially by means of the nautical schools, of the advantages adherent to the use of original charts, by the Hydrographic Offices, each in their own countries,

The Chairman in opening the discussion, said that the idea of the Netherlands Government was excellent, namely to make a collection of original charts of the Baltic Sea issued by the different Baltic nations, especially for Northern Maritime countries which had the same language and which were likely to understand in the same way any information given on the charts of these different nations, together with the original Notices to Mariners which referred to these charts.

This was not possible for Italy, he said, because in that country the internationalisation of abbreviations and signals was referred to.

Captain Luymes (Netherlands) spoke as follows:

"As to the Comment of the Bureau I beg to remark that the proposal to cooperate in the use of original charts is not meant with a view to economy, *but in order to put the best charts available at the disposal of the seaman*. A copied chart can never be as up-to-date as an original one. This is especially the case for charts of alluvial areas and for charts of areas where a survey is in progress, for instance, the latest British Admiralty chart of the River Schelde is dated November 1923. In May 1924, our Office published a new chart based on a totally new survey. Whereas our chart is according to the survey of 1922, the basis of the British one is the survey of 1905. See also the British chart 2760 of North Sumatra, new edition September '22. In this chart surveys made in 1908 and later are not yet incorporated, which the Dutch charts have already shown for a number of years, as an illustration of this, the Islands Nias and Simeuloer are still given according to the old and very defective compilation. The copied charts are nearly always drawn on a smaller scale than the original, whereas a much greater choice of scales is given, thus a steamer going to Sinabang Bay (Simeuloer), from where there is a big export of wood, finds, on the British chart mentioned above, the island on a scale 1/1,000,000 only, and

a totally obsolete plan of the island and of the bay on British Admiralty chart 2201. In the Dutch charts he can find a choice of representations on 5 scales larger than 1/1,000,000, all based on the modern survey of 1912.

The master of a Dutch steamer complained that the scale of the British coast chart between Cape Gross and Walfish Bay (S. W. Africa), where fog is not unusual, was too small for near shore navigation. That scale is 1/750,000. Germany publishes, besides charts on these scales, a choice of original charts on larger scales (of 1/300,000 to 1/100,000) and even larger.

Another master was advised (B. a. Z. No. 209/1926) to use the American chart (C. & G. S.) No. 902 scale 1/100,000, instead of the British chart No. 3408 (1/325,000) for calling at Port Arroyo (Puerto Rico).

I am obliged to make this criticism in the interest of the subject, but I hasten to remove the impression that it affects British copied charts only. Next to our own, I know British charts best and moreover a Dutch proverb says "the highest tree catches most wind". What Great Britain has done for scores of years, namely, to give a complete set of charts for the whole world, no other nation could yet achieve. And Great Britain had to furnish much of the data itself by surveying foreign coasts, that were neglected by their owners! Although Great Britain has not done such totally disinterested work solely for the benefit of mankind (other than the British) it has nevertheless deserved the warm appreciation of sailors and hydrographers.

From the other nations which, as far as I know are trying to achieve a complete set, I mention France, Germany and the U. S. of America. According to the available information, those countries have published respectively 2760, 707 (catalogues of 1925) and 2706 (Annual Report of the Navy Department 1925, page 180) charts. Roughly speaking, France and the U. S. of America are on the same level. In the Annual Report of the U. S. Navy Department, 1925, is stated that it is still necessary to cover 22.4 % of the needed charts by British Admty. charts (page 212). In 1917 this percentage was 29.4. The American Hydrographer states on pages 183 to 188:

"There is a general shortage of civilian personnel, making it difficult, if not impossible, to comply thoroughly with the mission of the H. O. ...The work required to make the U. S. independent of foreign sources of chart supply cannot be done in a reasonable period with the present complement... There were 153 civilian employees..."

"Under these conditions the U. S. A. must, for years to come, remain entirely too dependent on foreign sources of chart supply."

This speaks for itself and if we now compare the copies with the originals, for instance the American chart No. 3009 with the Dutch charts of the entrances to Soerabaja and adjacent channels, we cannot help seeing advantages in the use of original charts.

I do not at all understand why it is necessary for America to copy the British chart No. 32 "Falmouth harbour" (No. 4530 American) which copy consists of an absolutely photographic reproduction (facsimile), without even changing the British symbols for buoys, beacons and lights! (which is done on other charts, for example on the above mentioned No. 3009). Obviously difficulties of differences in languages or difference in chart symbols have not led to copying *this* chart (32).

Although on page 191 of the above Report relative to the issue of charts of New Zealand and Australia it is stated that "the completion of these charts has saved thousands of dollars", I do not think that the salaries of the men who are necessary to complete a set of the whole world are taken into consideration. In the long run it must be more economical to print more copies from an existing plate, than to print an extra edition from a new plate.

Commander Haselfoot (Great Britain) suggested that the discussion of the particular subjects in question should be kept to for the moment, and

that the cases brought up by Captain Luymes relative to British Chart No. 32 and U. S. chart No. 4530 etc. should be discussed later when the question of copyright of Hydrographic Publications was arrived at.

M. de Vanssay (France) said that, except for a reservation which he had noted, he agreed with Captain Luymes. It would be a good thing to give the most complete charts possible to mariners.

As to the difficulty of chart reading for foreigners, he said that this would gradually decrease, and the aim of the Bureau was the standardisation of charts.

With reference to this, he recommended that the Bureau should consider publishing a small book such as was to be found in the U. S. A. which was meant to assist in the reading of foreign charts. The French Hydrographic Service had a book like this; it would be of interest to widen this system, by accompanying the book in question by condensed dictionaries in which mariners could find those few words which were incomprehensible to them on the charts.

He added that no Hydrographic Office in the world, however complete it might be, could possibly reproduce the large scale charts published by all nations.

One of the reasons for which many countries, notably France, had published charts of the whole world, was the difficulty that sailors experienced in finding the necessary charts for the needs of navigation.

Finally, the French Delegate asked that the reservation proposed by him might be discussed.

Commodore Reinus (Sweden) agreed with Captain Luymes and M. de Vanssay. The question was very important. He did not think that the Committee could solve it immediately. In his opinion, the best method was to request the Bureau to pursue the study of the problem, by trying to find a means of generalising the use of original charts.

Captain Luymes (Netherlands) was of the same opinion.

Replying to the French Delegate on the subject of the communication he had made concerning original charts, he read the following passage therefrom:

"This is a purely cartographic work, which any other Hydrographic Service can also carry out, because it possesses the same documents for that purpose".

He said that it was difficult for a foreign Hydrographic Office to foresee the new editions which might be made and to draw up its own accordingly, because it was not aware of the surveys which were being made.

When the French Hydrographic Office ordered a new partial survey to be made, it could make arrangements so that in the editions of the charts concerned, the new data might be incorporated as soon as possible. Nations who copied these charts were not aware that surveys were being made or when they were finished, and could begin copying directly after the new editions of the French charts had been supplied to them. But this was probably not the best moment to renew the copied charts.

The Netherlands Delegate said that, in his opinion, it was difficult to define an original chart. There were cases, he said, when this distinction was easy, for instance the British Admiralty chart of the Thames estuary was original, but a chart of the North Sea, on which the coasts of many countries appear, was a mixed chart and not original. There were cases in which it was difficult to fix a line of demarcation.

He mentioned a third case, as follows: an American chart of the Baltic Sea was not an original chart at all. A precise definition was difficult to give and it must be left to Hydrographic experts to define, in each case, whether the chart in use was purely original, or merely partially so.

Commander Haselfoot (Great Britain) did not think it useful to enter into long discussions on this subject. He thought it was chiefly the task of the Bureau to reach a practical solution of the question. A prolonged debate in Committee would only be a waste of time.

No doubt, the proposal submitted to the Committee was quite desirable from a hydrographic point of view, but its solution presented a certain number of practical difficulties, and the British Delegate was not convinced that the experience of the Netherlands since 1925 would give a complete solution of all these difficulties. If, however, the Committee considered that it should make a resolution on this subject, this resolution should take the form of a desire that the proposal should be more deeply studied, and that, where geographical conditions allowed, practical experiments should be carried out in well defined zones by countries so requested, applying the principles employed during the experiments of 1925. This would be the only way to take the question satisfactorily, for it was only by studying small and well defined zones from every point of view that the difficulties to be surmounted could be realised.

The British Delegate, to bear out his argument, gave as examples Notices to Mariners, correction of foreign charts, etc...

With regard to the definition of the words "Original charts", the British Representative said that he was in agreement with Captain Luymes, that it was difficult to find a precise definition or to arrive at a very definite line of demarcation between the original and non-original portions. It seemed to him that, according to the proposed definition, a chart could not be considered original when drawn up according to information furnished by a country other than that which had published the chart. He gave as an example the chart of Algeria, the surveys of which had been made by France and on which appeared only original soundings made by the French Hydrographic Service, and which in consequence must be considered as an original chart. On the other hand, the general chart of the Mediterranean, which gave not only soundings taken on the Algerian coast, but also soundings by Greece, Italy, Great Britain and other countries, could not be considered as a really original chart but should be called composite. It would be easy enough to distinguish between original and composite charts if it were decided to admit as a composite chart any chart containing information not entirely provided by the publishing Hydrographic Office.

M. de Vanssay (France) wished to reply to Captain Luymes' remarks as to the difficulty of finding a definition for original charts. First of all he declared himself in agreement with the Netherlands and British Delegates that it was very difficult to fix this definition; but on the other hand, it would have to be admitted that it was indispensable for the I. H. B. to have a precise definition of an original chart. As a matter of fact, the I. H. B. was requested to publish a catalogue of these charts, and the charts mentioned in this catalogue would be considered as particularly suitable for mariners. Consequently, the I. H. B. would risk being charged with partiality if it only showed a certain chart, whereas for the same region there might exist other charts, equally entitled to mention.

The French Delegate then considered the catalogue published by the Netherlands. He found under "A" a chart numbered 2114 recorded as an original English chart, and he believed that on it there was not a single sounding which had been taken by the British Admiralty; meanwhile excellent Danish and Swedish charts exist for this same area, made at about the same time. He wondered how the I. H. B. might be called upon to choose from this catalogue a chart published by one country more than another for the same area, as this would necessarily lead to complaints.

M. de Vanssay gave another example: in this catalogue there was to be found chart No. 2150 of the German, Danish and Swedish coasts, and a Brit-

ish chart had been adopted. There was an excellent German chart for this area, and Germany would be entitled to demand that it be inserted in the catalogue.

A very precise rule was therefore needed, he said, and he had tried to give one.

In reply to the British Delegate who, with reference to the chart of the Mediterranean, had said that a chart could never be considered original if it contained a sounding taken by a country which had not published the chart, the French Delegate said that such was not his definition. His definition was as follows: "original charts are those which, totally or partially, are established directly by means of the original documents of the surveys and without making any use whatever of charts already published". These charts therefore must be published partly by means of original information. As for the chart of the Mediterranean, it was impossible to consider it as an original chart; all countries concerned had worked on it.

The French Delegate could see no reason to choose the chart of one country more than that of another, especially as the I. H. B. was, after all, an international organisation. The I. H. B. should therefore be absolutely impartial and complaints would certainly be made if one chart were chosen rather than another.

The **Chairman**, pointing out in the French Delegate's proposal the words: "original charts are those which, totally or partially, are established directly by means of the original documents of the survey", said that that meant that parts of these charts were drawn up by other countries.

M. de Vanssay (France) replied that this was not necessarily the case. Certain parts of these charts might have been drawn up by other countries, they might also have been taken from charts of the same countries drawn on the same scale.

The **Chairman** asked if a chart could be called "original" when it had been only partially made by the country concerned. Should not an original chart be made from surveys undertaken entirely by the same country.

M. de Vanssay (France) replied in the negative, for, he said, one would never have an original chart where a frontier existed. In the case of frontier regions, there are always two original charts: one for each side of the frontier.

The **Chairman** asked which would be the original chart for the French and Italian frontier, for example.

M. de Vanssay (France) replied that there would be two original charts, one French and one Italian.

Captain Luymes (Netherlands) said that this question was still to be considered; a frontier chart might refer to 98 % of one country and to 2 % only of the other.

The **Chairman** proposed that the following text should be put to the vote:

"Original charts are those which are established by means of the original documents of the survey, without making any use whatever of charts already published. They are therefore the largest scale charts by which a country published the results of its surveys."

M. de Vanssay (France) said that if the above wording were adopted, there would be no more original charts for frontier regions.

The **Chairman** replied that it was probable that, in frontier regions, charts were published of each side of the frontier by the country concerned.

M. de Vanssay (France) said that this was not always the case, as there were frontiers which were of no interest from a nautical point of view, and which cannot constitute the limit of a chart.

Captain Luymes (Netherlands) said that in this matter the decision should be left to the attention of the Bureau (Several Delegates indicated assent).

As to the criticism made by the French Delegate on the subject of British charts mentioned in the Netherlands catalogue as general charts, the Netherlands Delegate replied that these charts had been adopted in preference to others because they appeared to cover better all the areas in question.

He then expressed the opinion that where frontier zones or inland seas like the Baltic or the Mediterranean were referred to, the best solution was that, in future, the States concerned should agree to arrange their charts so as to form international series.

The **Chairman** asked the French Delegate whether he insisted that the Committee should take a decision as to his proposal to define original charts, or whether he thought that this question could be referred to the consideration of the Bureau.

M. de Vanssay (France) agreed that it should be left to the Bureau.

The **Chairman** expressed the opinion that, in this case, the Committee could be content to adopt the following resolution :

" The Committee considers it of the highest importance that the question of original charts should be thoroughly examined by the International Hydrographic Bureau, in order to allow these charts to be used generally. The Committee thinks it advisable that practical experiments should be carried out by the nations concerned in well defined zones, where geographical circumstances allow and that the experiments should be made on the basis of the principles used by Holland in 1925 ".

Unanimously adopted.

13. SAFETY LANES AND DANGER ZONES.

The Bureau proposed :

" to urge some international organisation, which may not as yet be formed, to take up the study of the delimitation of lanes of traffic and danger zones in much frequented waters ".

The **Chairman** said that this proposal seemed to have an international juridical character and partly modified that which was laid down in the " Regulations for preventing Collisions at Sea ". For this reason, he considered that this matter was not within the province of the I. H. B. ; a supervision service indicated which were the recommended routes for the North Atlantic, all of which were modified to allow for the presence of icebergs.

Captain Luymes (Netherlands) said that the safety lanes of the North Atlantic were settled for the open Ocean by agreement between important shipping lines, which had the same object and which owned the same type of ship ; but the safety lanes and danger zones referred to in the Bureau's proposal meant much more frequented zones near the shore or even sometimes inland waterways, where were to be found ships of all kinds, from the trawler which did not carry wireless to the ocean liner with all the latest navigational improvements.

Anyhow, the Netherlands Delegate thought that the proposal submitted to the Committee raised the very difficult question of knowing who should have the control of non-territorial waters.

On the other hand, — and this was not a question of minor importance, — the proposal appeared to the Netherlands Delegate to be more concerned with navigation than with hydrography and with regard to this he thought that latterly the I. H. B. had shown a tendency to transform itself into a Navigation Bureau, which seemed to him to be contrary to the Statutes of the Institution.

He concluded by saying that he agreed with the opinion of the Chairman.

Commander Haselfoot (Great Britain) said that he was absolutely in agreement with Captain Luymes and the Chairman.

Commodore Reinius (Sweden) did not agree with this point of view. The question seemed to him of very great importance and he thought that the I. H. B. could easily ask another international organisation to undertake the study of this question, if it could not do so itself. He admitted however that he did not know which organisation, could be entrusted with this examination.

M. de Vanssay (France) agreed with the Swedish Delegate

The **Chairman** put the Bureau's proposal to the vote, as follows :

" to urge some international organisation, which may not as yet be formed, to take up the study of the delimitation of lanes of traffic and danger zones in much frequented waters".

This proposal was adopted by 8 votes to 7.

The following Delegations replied *Yes* :

Argentine - China - France - Greece - Japan - Portugal - Spain - Sweden.

The following Delegations replied *No* :

Great Britain - British India - Egypt - Yugo-Slavia - Germany - Italy - Netherlands.

The sitting was adjourned at 1130.

CHAPTER VII.

The meeting of the sub-Committee "D," was held at 1500, on Friday, 5th November, 1926, Commodore Reinius in the Chair.

TIDAL INFORMATION TO BE GIVEN ON CHARTS.

The **Chairman** read the Proposal of the Bureau, No. 14.

"as a rule no information as to tides should be given on charts except on plan charts and this information should be based as much as possible on harmonic constants".

He stated that the same Proposal had been submitted with respect to "Sailing Directions" and that in that case the Committee had decided to postpone the question until the Committee on Tides should have completed its labours, and he proposed that this question of Tidal information should also be put off in the same way.

In reply to a question by the Chairman, **Captain Luymes** (Netherlands) stated that the Committee on Tides had held its first meeting on the previous day and as far as he could ascertain nothing much beyond a little discussion had taken place, no Resolutions had been adopted.

The **Chairman** asked whether in view of this information, the Committee was prepared to accept postponement of the question.

Commander Haselfoot (Great Britain) suggested that, as the Tidal Committee would deal entirely with the question of Harmonic Constants, it might, on submitting its Report to the Plenary Session, ask to have the decision taken there. He did not see any object in referring the question back to the Charts Committee.

This terminated the discussion.

The **Chairman** asked whether the Committee wished this question to be put to the Plenary Session.

Captain Luymes (Netherlands) suggested that the Tidal Committee should be spoken to on the subject. It might be asked to give a Report on it.

The **Chairman** stated there were two proposals before the Committee :

1. That the question should be put to the Plenary Session ;
2. That the Tidal Committee should be spoken to and asked for its opinion.

China, Egypt, Great Britain, Greece, Argentine and Sweden were in favour of the first.

France, Germany, Netherlands, Portugal and Spain were in favour of the second.

It was accordingly decided that this question should come before the Plenary Session.

COPYRIGHT OF HYDROGRAPHIC PUBLICATIONS.

The **Chairman** read the Proposals of the Chinese Government.

The CHINESE Government proposes :

"1.— That States Members of the Bureau reserve copyrights over all their respective hydrographic publications, including charts.

"2.— In the event of the Hydrographic Department of one Member State desiring to reprint or reproduce a hydrographic publication or chart

of the Hydrographic Department of another Member State, that permission be first obtained from the latter who holds the copyrights.

"3.— Whenever the aforesaid permission is granted, that a note be included in the title of the reprinted or reproduced publication or chart, denoting the fact that such permission has been granted by the holder of copyrights.

"4.— That no private or commercial concern be given permission by States Members to reprint or reproduce for their own benefit any hydrographic publication or chart covered by a copyright."

Commander Shao Chung (China) read the following statement :

"In this proposal I desire to have more definition. The first point of this proposal made by the Chinese Government regarding safe guides for navigators, this not exclusively to prohibit reproduction between the Hydrographic Offices of different nations.

In China, most of the rivers and harbours are in a condition of rapid change, necessitating frequent readjustments in the positions of aids to navigation. Charts of these rivers and harbours therefore have to receive frequent corrections to maintain them as safe guides to navigators.

Nationals of a foreign nation who reproduce the Chinese Government's Charts of rivers and inland harbours produce, in most cases, charts which have become out of date during the period that has elapsed between their leaving China and their receipt and reproduction in a foreign country.

For the reasons I have just given the proposals are made with the desire — and here I would ask you to turn to the "Proposals Made" :—

Para. 2. 'In the event of the Hydrographic Department..... who holds the copyright' — not to prohibit the reproduction but merely to serve a nation which wants to reproduce charts of another nation, to make them more safe and valuable at the time of asking permission, because at that time the former will get the latest information from the latter if any readjustment has taken place up to that time; or if the rivers and inland harbours included in the chart are to be re-surveyed or republished on account of rapid change.

I think it is quite a good idea and makes for greater safety for navigation. It is evidently not opposed to the Resolution of the London Conference.*

From the Comment of the Bureau it looks as though they have slightly misunderstood the exact opinion of our Government which I have just explained.

I would refer you to the Comment of the Bureau in 'Proposals Made'. Para. 3. which states that "Surveys are not made with the object of constituting an exclusively national property, but in order to contribute to the safety of navigation". Our Government realises this well, for it is quite evident that every nation has published its own chart which has cost it a great deal of work and a great deal of money, and if the desire of any nation is based only on the very small profit on the chart, I think this would be bad policy, because the chart is almost always sold at a lower price and does not at all correspond with what has been spent on the surveys. The idea is of course to contribute to safety.

May I refer you to Para. 4 which reads as follows :

"Reserving copyright for hydrographic publications, as is intended by Proposal 1, and obtaining permission for reproducing them, as Proposal 2 prescribes, would delay and might even prevent altogether the possibility of promoting safety at sea by all nations, except the one which made the survey".

* (Section IX, D, page 43 of Report of Proceedings, of the London Conference, discussion page 69, par. 17) which says :

"that it is desirable that every Hydrographic Office should be free to reproduce, except in fac-simile, all publications of other Hydrographic Offices, provided that such reproduction shall have printed on it a due and proper acknowledgment of the original source from which it is derived."

Our Proposals 1 and 2 mean that permission should be obtained before reproducing, that is to say that the information passed between the Hydrographic Departments ought to make for greater safety. This information can be transmitted by telegraph or by wireless, taking in this way one or two days, so that there is no delay.

Paragraph 5 of Comments states that "Proposal 3 is already covered by the Resolution and, as to proposal 4, no State Member can prevent a private or commercial concern from reproducing hydrographic information. In nearly every country, this right is enforced exclusively by the law of copyright, and nobody but the holder of the copyright can sue the concern which copies".

Proposal 3 is indeed covered by the quoted Resolution of the London Conference; but it is derived from Proposals 1 and 3 because permission must first be obtained and then due and proper acknowledgment is effected.

Proposal 4 means, for example, that Chinese Charts have been reproduced in some country outside of China where copyright cannot be enforced. The reproduction has been made with inferior printing material, the lithography is bad and they are alleged to come from the Chinese Government. Such charts are a danger to the mariners who use them. It was for this reason that the proposal was made with the desire that other nations who are Members of the Bureau shall prohibit their nationals from publishing other country's charts in their country. It is not a question of infringement of copyright but a means on avoiding inaccuracy in printing which may mislead those who use them, and further, in the Resolution adopted by the London Conference the reproduction is limited only to Hydrographic Departments of nations and is not allowed to any private or commercial concern".

The **Chairman** proposed that a general discussion on the whole question should be taken first, and that afterwards one point after the other might be taken.

This was agreed to and the general discussion was opened.

Captain Luymes (Netherlands) asked whether he had grasped aright the meaning of the Chinese proposal.

Namely that it was not so much that China objected to the copying of charts by foreign Offices as by private firms, further that China wished to withhold the copyright from such Offices which did not prevent re-copying of charts by private firms.

Commander Shao Chung (China) said that was the meaning he wished to convey.

Captain Luymes (Netherlands) said that he sympathised with the idea, because according to his opinion the copying and reproduction of charts and hydrographic information by private, irresponsible concerns should be prohibited, now that there were everywhere official institutions charged with making surveys and with publishing hydrographic information. He deemed, however that such a prohibition was not feasible in many countries, and the result of putting the law of copyright into force was very doubtful, if the reproduction was not made in facsimile. For that reason he could not vote for the Chinese Proposal, not that he was out of sympathy with it but on account of difficulties of a practical nature. He advised, however, that the action of those private concerns, the publications of which must be of lesser value than those of the official institutes should be thwarted as far as possible, because these were never based on original surveys and were always copies or even mostly copies of copies. Moreover, the speaker continued, these concerns were in a weaker position financially and therefore their publications were not renewed as frequently as those of official organisations. Such prohibition might be effected indirectly by providing, as far as possible, for the wants of the Mercantile Marine and by pointing out the defects of the publications of private concerns.

Captain Crosley (United States) read the following statement :

" Before the contents of either paper just read had been known to me I wrote the following :

" It is my belief that the proposal to copyright charts resulted from a desire to prevent irresponsible agencies from copying them. This cannot be, and I believe is not, applied to Governments.

" Government Chart activities of the United States do not wish to copyright their charts.

" Irresponsible activities would have little luck in the States, there is no market for them, the market is supplied by the Government activities and while there are possibly two chart-making activities, those activities are very small, and for a particular class only, such as for instance, fishing.

" I believe this to be a matter for the decision and law of States concerned. It appears that those of us who wish to reproduce Chinese Charts must, in self-defence, get the latest information from the Chinese H. O. "

Commander Shao Chung (China) replied that that was the case.

Captain Schweppe (Germany) observed that the German prescriptions with regard to the copying of official charts was the same as that which had been explained by Captain Crosley.

Commander Shao Chung (China) stated that the Chinese Government when drafting this proposal had not had in mind so much the copyrights; their idea was to prevent dangers to which mariners were exposed. He was of opinion therefore that there was no need to continue the discussion.

Commander Haselfoot (Great Britain) stated that the discussion had led him to believe that the copying of charts by nations was now in order and that there were no complaints to be made between nations about copying each other's charts. The suggestion had been made to prevent private firms from reproducing charts and he agreed with that proposal, but he thought it was more important to settle the question as between nations before attempting to suggest what should be done about private firms. The speaker referred to a Resolution of the London Conference of 1919 which, under the heading of :

" The Reproduction of Charts and all other Hydrographic Publications of other countries "

laid down :

" That it is desirable that every Hydrographic Office should be free to reproduce, except in facsimile, all publications of other Hydrographic Offices, provided that such reproduction shall have printed on it a due and proper acknowledgment of the original source from which it is derived "

He wished to remind them that that Resolution had not been carried out, and the British Delegation had a very strong reason for bringing this to the notice of the Conference. Might he give them an example: He would take a country " A " which surveyed and produced a chart, and " X " a foreign country which reproduced that chart, employing its cartographic staff for drawing, conversion of metres into fathoms or vice versa, etc., and to put it into the reading language of that country. " Z " was another country which by photography or other means of direct reproduction photographed or produced " X " charts and in the title of that chart stated that the survey had been carried out by " A ". That meant that the chart made by " A ", the original surveyor, appeared as a reproduction by " Z ", but in reality it was a photographed copy of the cartographic work of " X ", and might seem to be an example of one nation taking advantage of the cartographic staff of another with a view to underselling on the market. The opinion of the British Hydrographic Department was that, to prevent such procedure, the Resolution in question ought to be carried out.

This ended the general discussion.

(The U. S. Delegate here withdrew from the meeting).

The **Chairman** asked whether the Committee wished to discuss the four points of the Chinese Proposal.

Mr. Richards (Egypt) said that he understood the Chinese Delegate had withdrawn them.

The **Chairman** said there was no need to discuss the question further but the proposal was not withdrawn.

Commander Shao Chung (China) said he did not wish to go on with the discussion.

M. de Vanssay (France) suggested that the Committee should recommend that the London Conference Resolution be applied more strictly.

The Delegates of Egypt, Germany and the Netherlands were in agreement.

Captain Luymes (Netherlands) suggested that it would suffice to say "strictly", seeing that they were as yet not applied at all.

The **Chairman** proposed the following text :

"The Committee expresses the wish that the Resolution of the London Conference referred to in the Commentary of the Bureau should in future be strictly applied".

This was unanimously adopted.

CONTOURS OF DEPTH. (Cont.)

The **Chairman** informed the Committee that the Chairman of the Committee on the Work of the Bureau had forwarded to him a copy of the Minutes of the First Meeting of his Committee and begged him to deal with certain Resolutions which had been marked. The first of these was one concerning Contours of Depth. The resolution read as follows :

"The Committee was of opinion that the Work of the Bureau on this question has not been settled and decided that the question of this resolution should be left to the decision of the Charts Committee".

The **Chairman** added that it had been decided that the question of Contours of Depth should be referred to the Bureau and he proposed this Resolution should be treated in the same way.

The Committee agreed.

COMMON ABBREVIATIONS. (Cont.)

The **Chairman** read the next Resolution :

Common Abbreviations. — "The Committee decided in favour of the draft resolution but that the matter shall be referred to the Charts Committee for its information and concurrence".

In order to throw some light on the question the **Chairman** read the following text from the Report on the Work of the Bureau. (Page 17) :

Resolution made under Section I - E.

"It is agreed that the question of the universal adoption of common abbreviations should be referred to the International Hydrographic Bureau, when formed, with a view to the internationalisation of Charts.

"The Board decided, after lengthy consideration, that the only means of solving this question is the adoption, for this purpose, of abbreviations of words belonging to one of the so-called 'International Auxiliary Languages' but that this is impracticable under existing conditions".

The **Chairman** proposed that this matter be referred to the Bureau.

It was unanimously agreed that this be done.

CATALOGUES.

The **Chairman** referred to Part V. of CATALOGUES.

I. "INSERTION OF DATE OF LATEST CORRECTION".

The Netherlands propose :

"the insertion in the Catalogue of Charts of a column mentioning month and year of the latest small correction".

Comment of the Bureau.

"The Bureau thinks the proposal very useful and recommends that Great Britain will state its reasons for the suppression of this information in its later Catalogues, as these might influence the votes of the States Members".

Commander Haselfoot (Great Britain) stated that the column in question had been suppressed in the interest of economy as it was not considered that the information given had any practical value. Further it could only be corrected on the particular date on which the catalogue was compiled.

Captain Luymes (Netherlands) said he would like to explain how they had made use formerly of that issue column in the British catalogue. Often the British Admiralty Notices to Mariners did not correspond with the British chart in use in the Dutch Office because this was of an earlier date than the chart according to which the Notice to Mariners had been drawn up. Formerly the Dutch Office had been able to see from the catalogue the year of the latest reprint and could so ascertain whether the charts that Office used were very much out of date or not.

Of course, mariners could obtain the same benefit from the column "Latest small corrections" formerly found in the British catalogue.

M. de Vanssay (France) observed that the information to which the Delegate of the Netherlands referred was not given in the French catalogues; in France they merely published a list of original editions and of special publications. They also published a list of charts and of all the corrections made in the course of the preceding year.

Commander Haselfoot (Great Britain) stated that the latest editions were given in the catalogue of charts.

Captain Luymes (Netherlands) agreed as to the latest "new editions" but this proposal concerned the column "latest corrections" formerly given in the British Admiralty Catalogue and now inserted in the Dutch catalogue.

Commander Haselfoot (Great Britain) asked whether he had understood Capt. Luymes to say that he thought the catalogue should give all the previous editions together with the intermediate Notices to Mariners.

Captain Luymes (Netherlands) replied in the negative.

M. Zacharias (Germany) said that they had been talking about the latest new edition, but he understood that by the latest new edition all other editions were obsolete. After some time there were a certain number of small corrections, and a small reprint was necessary. In the left column in the corner the month and the year of this reprint was put and also this latest reprint was put in the catalogue. It could always be seen if the chart the seaman had on board was relatively old or was the newest that had been published.

The **Chairman** asked if the discussion was finished?

Commander Haselfoot (Great Britain) wished to inform Captain Luymes that if he would look at the top right-hand corner of the British Admiralty chart he would find the date of printing.

Captain Luymes (Netherlands) said that the question was as the Delegate of Germany had explained it.

The Chairman wished to know if the discussion was finished, and desired to propose the following :—

"The Committee's opinion is that such a column may be useful, but that it is not necessary".

Commander Haselfoot (Great Britain) seconded the proposal, *which was adopted without further discussion.*

The Chairman then took. *Va. Catalogues* in "Proposals Made" issued by the International Hydrographic Bureau

2. — ENGLISH IN NON-ENGLISH ISSUES:

Sweden proposes that :

"The Catalogues of Charts of all nations using languages other than English should be translated into English, in order that they may be read and understood by mariners of any nationality (the English language being the only one with which the mariners of all nations are generally more or less acquainted). Then the introduction, the preface, headings, heads of columns, etc., should be translated into English as is the case, *e. g.* in the Swedish Catalogue of Charts".

It had been proposed that the catalogues used by all nations should be translated into English in order that it might be read and understood by mariners.

He suggested that this proposal should be so changed that after the word "English" at the end of the first line the words "or French" should be added; also after the word "English" in the second line; so that the sentence should read as follows :—

".....using languages other than English *or French* should be translated into English *or French*....."

He declared the discussion open.

Commander Haselfoot (Great Britain) wished to know if the sentence in brackets was to be amended in this respect also; *i. e.* whether the words "...the English language being the only one with which the mariners of all nations are generally more or less acquainted... was to be changed to... "the English and French languages... etc...".

The Chairman proposed that the sentence in brackets should be deleted.

M. de Vanssay (France) thanked the Chairman for the modification which he proposed. He himself had had a great number of catalogues passed through his hands, and had never found any difficulty in understanding them except when they were printed in other than Latin characters. Of course, seamen might not always have the same facility in interpreting such catalogues, and it might be well therefore to introduce such a provision as Sweden now proposed.

The Chairman agreed with M. de Vanssay. At the Head Office naturally no difficulties would arise in understanding catalogues, but such difficulties might arise on board ship. He wished to know if Delegates agreed to this proposal.

Captain Fablet (Argentine) wanted to know whether translations would be necessary in the Hydrographic Office, or whether they would be used on board ship. In the Hydrographic Office there would be no difficulty with regard to translation, but if such a translation were needed for mariners there was likely to be some difficulty.

The Chairman said that Sweden's proposal would make it easier for mariners to study a Swedish catalogue, especially as the question of using original charts had arisen.

Captain Luymes (Netherlands) thought it was a good thing to make the publications of the Bureau legible to all mariners. Like the Swedish language, his own language was not so very much used beyond Dutch boundaries, therefore his country would do the same as Sweden and give a partial translation of the catalogue. This would be sufficient to make it more accessible to other countries and to enable more persons outside the country to understand it.

The **Chairman** asked those Delegates who agreed to the Swedish proposals to raise their hands.

All the Delegates with the exception of those of Spain and the Argentine agreed to the proposal, which was therefore adopted.

He then read the following *Comment of the Bureau* :

"It would even be advisable for these nations to consider whether an extension cannot be given to this idea, by adding an English summary to each of these publications which they wish to bring to the notice of other nations. It must be very discouraging for them to see that other nations cannot profit by their publications, in the compilation of which much labour and pains have been expended, on account of the language used, and to know that the money spent on presentation copies is almost wasted because only few H. O. and still fewer seamen of foreign nationality can read and translate them."

There was also a proposal from Sweden which he wanted to put forward :

" The Committee find it desirable also that an English or French summary might be given of those Hydrographic publications which the Hydrographic Office wished to bring to the notice of their nations "

This proposal was seconded by **Lieutenant-Commander Golemis** (Greece).

On being put to the vote it was carried by 7 votes for, and 4 votes against.

M. de Vanssay (France) said that in connection with the resolution just passed, he wished to make the following proposal :

" If an interesting publication has been issued by any Hydrographic Service in a language generally unknown to mariners could such a publication be reproduced by the International Hydrographic Bureau "

Captain Fablet (Argentine) thought it might be well to determine which were the languages generally understood by mariners and which were not. Was it intended that the English and French languages were meant in this connection ? It might be advisable to have some definition.

The **Chairman** said that if the Committee agreed to this proposal it was quite clear that the International Hydrographic Bureau would use the two languages, English and French, and that these publications would be published in English and French.

Captain Fablet (Argentine) said that the French Delegate had spoken of languages generally unknown to seamen, and the Delegate of the Argentine suggested that it would be well to have a closer definition of what were the languages generally unknown to seamen. He would suggest " languages other than French or English ".

The **Chairman** thought it would not be difficult to decide which languages were more or less generally unknown.

Captain Luymes (Netherlands) said he hesitated after the vote which had just been taken to say either yes or no, because a summary was only half a statement. However, he agreed with the proposal of the French Delegate ; in fact, he desired to second it.

The **Chairman** said that if one country published a book or an article which it found practicable, other nations might apply to the Hydrographic

Office for a summary. If, on the other hand, the Bureau found that a book could be translated, it could do this and go forward with its publication. The Bureau should be able to undertake to translate a book into another language.

M. de Vanssay (France) proposed that when a country had published, in a language other than French or English, an article or a book which it would appear to be useful to bring to the knowledge of mariners of all nations, the International Hydrographic Bureau could undertake its translation into French or into English.

The **Chairman** asked if the Delegates agreed to this proposal.

Mr. Richards (Egypt) asked for information about copyright.

The author of the motion suggested that "obtaining the copyright" might be added after the words "with the permission of the authors".

The **Chairman** asked if the Delegates agreed to this addition, *which was thereupon adopted, as also was the proposal, the Delegates of the British Empire, Egypt and Germany abstaining from voting.*

3. CATALOGUE OF ORIGINAL CHARTS.

The **Chairman** stated that a proposal for a catalogue had been put before the Committee. He proposed that the Committee should refer this question back to the Bureau as there was no time to go further with this proposal. He referred the Committee to "Proposals Made".

3. *Catalogue of Original Charts*, which ran as follows:

The Netherlands propose:

"the compilation of the said catalogue".

There was no time to discuss the question, and they would therefore ask the Bureau to deal with the matter.

This was agreed to.

"SUPPLEMENT TO PROPOSALS MADE".

5 (C) STANDARDISATION OF TITLES OF CHARTS. (cont.)

The Bureau proposes that:

"variation resulting from accurate magnetic observations made in places near the coast and which may be useful to seamen should be mentioned on the charts near such places or in the title".

The **Chairman** declared the question open for discussion.

Commander Haselfoot (Great Britain) said that the British practice was to regard special magnetic charts as a standard which could be consulted by seamen and others who desired greater precision than could be obtained from ordinary navigational charts. These magnetic charts were revised every five years, which was much more frequent than in the case of the average navigational chart; therefore, he did not wish the proposal to be carried.

The **Chairman** stated that Sweden did not publish special magnetic charts of the notices about magnetic observations, which could be found on the chart and in the Sailing Directions. In the Baltic there were many observations for magnetic variation sometimes very far from the coasts, and they found it very practicable to notice such anomalies on the charts.

Commander Haselfoot (Great Britain) said that where there were cases of abnormal variation it should be mentioned on the chart, but where the ordinary variation was being used, it would be possible to get it from the magnetic chart.

The **Chairman** having asked if any Delegate wished to make further remarks, asked for a vote to be taken on the proposal of the Bureau.

The result was 9 votes for, 4 votes against the proposal.

The **Chairman** said that it would appear that every thing had been dealt with, with the exception of official publications, and he was not certain whether the question of charts on pages 3-6 was one which they had been asked to study. He, therefore, asked the Committee if they agreed to take these general proposals in the Supplement then, or whether they would refer it to the Plenary Session.

Lieutenant-Commander Golemis (Greece) said that the Plenary Session had decided what the work of their Committee was to be, and it would be necessary to consult their resolutions in order to see whether these questions had been referred to them or not.

Mr. Richards (Egypt) read a resolution to the effect that the Charts Committee would be requested to include in their subjects for discussion sailing directions, notices to mariners, catalogues, etc... This meant they were to deal with pages 1-14 inclusive in the volume on "Proposals Made", and pages 7-10 of the "Supplementary Proposals".

The **Chairman** suggested that as the Agenda was now finished the Meeting could close.

Mr. Richards (Egypt) proposed a hearty vote of thanks to the Chairmen Commander Baldi and Commodore Reinius, for the very able manner in which they had conducted their deliberations; also to the Secretary and members of the Bureau who had, in no small measure, helped towards the success of the Committee's work.

The **Chairman** thanked the Delegates for their help, and hoped the proposals which had been settled by the Committee would be of use to mariners.

He then read the following communication which he had been asked to bring specially to the notice of Members of the Committee:

"The Chair regrets to report that notice has been received from the head of the Dutch Delegation that the Government of the Netherlands withdraws the candidature for a directorship of the International Hydrographic Bureau of Rear Admiral J. M. Phaff. This is in accordance with the desire of the Admiral himself, who wishes to withdraw on account of the state of his health".

Copies of the communication were available for any Member of the Committee who desired to have one.

The meeting then rose at 1700.

CHAPTER VIII.

The first Meeting of Sub-Committee "D" was held at 1000, on Thursday, 28th October 1926, Commander C. Baldi in the Chair.

SAILING DIRECTIONS.

The **Chairman** opened the discussion on Chapter II of the Proposals made by the States Members and by the Directing Committee of the Bureau.

1. INDICATION OF SOURCE AND DATE OF DESCRIPTION OF FOREIGN COASTS IN NATIONAL SAILING DIRECTIONS.

The Netherlands recommend :

(a) "to mention clearly in non-original or partly non-original Sailing Directions which publications (with the year of issue) have been used or partly used for the compilation.

(b) "to use, for the compilation of non-original or partly non-original Sailing Directions, those issued by the country described or issued by the Government that controls that country".

Adopted unanimously.

Captain Luymes (Netherlands) proposed the translation of Sailing Directions into English or another world language (for instance Esperanto). An international set of Sailing Directions for the whole world, agreeing that the non-original parts of the volumes concerned should be either copied from the last edition of the Sailing Directions, corrected up to date, published by the country that owns or controls the coasts concerned, or drawn up as much as possible in co-operation with that country.

After discussion it was decided to adjourn this question until that of "Original Charts" was reached.

2. INDEX CHART OF SAILING DIRECTIONS TO BE USED TOGETHER WITH ORIGINAL CHARTS.

The **Chairman** put to the vote the adoption of the text proposed by the Bureau, namely :

The Bureau recommends :

"the publication of an Index Chart of original Sailing Directions to be used together with an Index of original charts".

The text was put to the vote and adopted by all Delegations with the exception of those of Great Britain and British India, who voted against, and of Egypt which abstained from voting.

3. TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS.

The Bureau proposes that :

"tidal information given in the Sailing Directions should be based, as much as possible, on harmonic constants."

The **Chairman** expressed the opinion that the present question was one of principle : They would now discuss whether this proposal should be comprised in the "*Sailing Directions*" Section.

Captain Hori (Japan) said that the Japanese Delegation was not, in principle, opposed to the proposal, but that it reserved the right to express an opinion later, either at another meeting of the Sub-Committee, or at a Plenary Session.

Commander Croissandeau (France) was of the same mind.

The **Chairman**, speaking as the Italian Delegate, was also of the opinion that all documents concerning tides should be discussed together.

Lieutenant-Commander Milne-Henderson (British India) understood that it had not been decided whether harmonic constants would be used. Once that were decided by the Tides Committee the question of where it should be inserted might be discussed.

Commander Shao Chung (China) seconded this proposal.

The Sub-Committee decided to adjourn the discussion.

Commodore Reinius (Sweden) announced that Sub-Committee "*D*" would commence the discussion the following day from page 5, I (Charts).

The **Chairman** asked those Delegations which had proposals to make, or amendments to suggest, to forward them to the Bureau without delay, in order to save time.

The sitting adjourned at 1100.

CHAPTER IX.

The second meeting of the Sub-Committee "D" was held at 1500, on Friday, 5th November 1926, Commander C. Baldi in the Chair.

The Committee commenced the examination of Chapter 3 of "*Proposals Made*".

1. ERROR IN REPORT OF PROCEEDINGS OF THE LONDON CONFERENCE OF 1919. — (*Section III, Sub-Section N, Par. II, page 35.*)

On the proposal of the Chairman the Committee *approved* the following correction to the Report of the London Conference :

"Period is the interval between successive commencements of the phase *i. e.* the time occupied by the exhibition of the entire system of changes included in that phase".

2. RANGE OF VISIBILITY OF LIGHTS.

The Chairman put into discussion paragraph 2 "*Range of Visibility of Lights*".*

He recalled that the London Conference had decided that the different States should be asked to send information to the I. H. B. as to the observations and studies made with a view to establishing a general formula for the determination of the visibility of lights according to the differences in the transparency of the atmosphere.

The Bureau had asked for this information and, as far as Italy was concerned, had written to the Technical Lighthouse Service at Naples. Unfortunately the data at present possessed by this Service were not yet suitable for dispatch to the Bureau. This meant extensive work and Italy would send this information as soon as it possibly could.

The Chairman asked the Netherlands Delegate to explain his proposal.

Captain Hooykaas (Netherlands) said that he had only a very few words to say with regard to the proposal. The Netherlands found the term "clear weather" very vague, as it did not give the sailor any help, and they suggested that every country should give, as France and the Netherlands did, the mean range, that was the distance at which the light was seen on 50 out of every 100 nights, which data would be more desirable. But the Netherlands

(*) The NETHERLANDS propose to use the following ranges of visibility for lights on coasts where the transparency of the air is much subject to changes :

(a) "for landfall lights, the geographical range with the percentage of visibility at that range ;

(b) "for the other lights the mean range (distance at which the light is visible in 50 nights out of hundred), if this distance be shorter than the geographical range ; otherwise the latter range ;

(c) "for all lights also the range for bad conditions of visibility, and to adopt for this range the distance at which a light is visible in ninety out of every hundred nights."

made, in his opinion, one mistake, and that was that they gave also the mean range of the powerful lights] of low altitude. The result was that a visibility was published, much greater, than the geographical range. Therefore the proposal was now (and it was already carried out by the Netherlands) that the geographical range should be given when the mean range was greater than the geographical range; if otherwise, the mean range should be given.

The **Chairman** wanted to know what was meant by mean range, and how it was possible to determine it.

Captain Hooykaas (Netherlands) explained that the mean range was calculated from a curve, and this curve was the result of many observations made from one or more lights. The Dutch delegation had distributed amongst the Delegates a pamphlet by Mr. van Braam van Vloten on this subject, which was a very interesting study and gave data deducing the distance from which lights could be seen in 50 out of 100 cases, even when lights were unobserved and were less strong than lights which were observed. He would like to tell all the Members of the Committee that this study was very interesting from that point of view.

Commander Warburg (Great Britain) said that he understood that the Bureau had sent out a Circular Letter asking for information on that subject, and wished to know if the Committee could be informed which nations had replied to that Circular Letter and whether any information had been received and dealt with by the Bureau. It seemed to him that until those results had been studied and more results obtained, the proposal of the Netherlands was rather premature.

Commander Rasikotsicas (Greece) said that in Greece it would be very difficult to give the percentage of visibility at the geographical range for up to now such observations had not been made. The Greek Delegate could not therefore accept the first paragraph "for landfall lights, the geographical range with the percentage of visibility at that range". Neither was it possible, said the speaker, to apply the formula which was proposed because the conditions were not the same in all countries.

Captain Hooykaas (Netherlands) said that the observations of the Greek Delegate were quite correct. Each country should make its own observations. He thought the Netherlands proposals might have been better if other words had been used; if they had said that they thought it advisable that each country should make its own observations in the same way as France and the Netherlands had done in their List of Lights. If this had been done the proposal could not have been called premature.

The **Chairman** asked the Netherlands Delegate what was the information already inserted in the Netherlands List of Lights.

Captain Hooykaas (Netherlands) said that the Netherlands gave four columns on their lists, but he agreed with the French Delegate who thought that rather many. (He drew attention to the chart given on page 32 of "Proposals made").(*) Several people objected to the four columns, but of course they could be condensed.

(*)	Height of lights metres.	Geographical range.	probable % at geogr. range	RANGES IN NAUTICAL MILES	
				mean visibility.	during bad visibility conditions.
Westkapelle...	54	19.1	74 %	—	9.5
Nieuwe Sluis.	15	11.9	54 %	—	4.9
id.	15	—	—	6.9	3.2
Borsele R. ...	14	—	—	5.4	2.7
id. W.....	—	—	—	7.7	3.5

Lieutenant-Commander Milne-Henderson (British India) said he was quite in agreement with the remarks made by the Delegate of Great Britain. He thought it was right that observations should be taken by as many countries as possible, but until the results already sent in to the Bureau had been collated and analysed by the Bureau itself, it was too early yet to draw up any definite formula determining the mean range or the range of visibility when bad weather prevailed.

Captain Hooykaas (Netherlands) said he was afraid he had not expressed himself very clearly. He thought every country which was able to do so should make its own observations and analyse them. Why should the Bureau do it if the countries had the staff and the money. The Netherlands were not suggesting a formula but asking for results of observations, therefore it was not necessary to wait until the Bureau had analysed all the information received. He would advise every country to make its own observations and to put the results in its List of Lights.

Commander Warburg (Great Britain) said he wished to point out to Captain Hooykaas that in Section VII of the "*Work done by the Bureau*" it was stated :

" it may be mentioned that the Bureau has received from the Hydrographic Office of the United Kingdom a complete set of such observations extending over a period of one year ".

The situation therefore was that Great Britain had carried out this work ; it had been carried on continuously, complete sets for one year had been supplied to the Bureau and work was still being carried on, but in spite of that the information available was not sufficient to carry out the proposed great change in the Light Lists. The further objection he had against the carrying out of the proposed change was that Great Britain published Light Lists for all the world, and they wish to keep them uniform. Partly because the information was not sufficient, because it did not exist in other countries, the British Admiralty did not feel able to agree to the proposal of the Netherlands even while recognising its importance.

The Chairman pointed out that the Bureau had made the following proposal.

" in each country where the position of the lights and light vessels allow of so doing, observations of other lights should be made from them, and that these data be sent to the Bureau for the purpose of deducing the percentage of visibility at various distances ".

Captain Hooykaas (Netherlands) thought that certain countries had not the necessary staff.

Commander Rasikotsicas (Greece) pointed out that according to the proposal of the Netherlands Delegate, those countries which, owing to their observations, could not calculate the range of the lights, should send their observations to the I. H. B. Now, the main difficulty was the actual making of the observations, not the calculation. In Greece the ranges of lights were already determined by means of the old Allard formula, but the ranges thus calculated were not very accurate, because the exact constants were not available.

Captain Hooykaas (Netherlands) said he would like to add to that paragraph the words " for those nations who are not able to do it for themselves ". He saw the difficulty of the British Empire, with regard to the List of Lights for the whole world, but he did not know in what way the distances were given now. What was the meaning of " clear weather ? "

Commander Warburg (Great Britain) said the present system was merely to take the geographical range of the lights. If the light was not visible at the geographical range, then a lower visibility was given.

The **Chairman** proposed that the amendment of the Netherlands Delegation be adopted.

Commander Warburg (Great Britain) said he could not accept the proposed amendment, because it seemed to him that work of that nature was eminently an international work, and that if the Bureau received all the observations from all countries they would be able to formulate a system which would be acceptable to all countries. If each country worked for itself it would get a different result. For instance, in the Mediterranean, it was very likely that Italy would get a lot of observations and Greece very few, and that the results of Italy could be utilised for the Greek Lists.

Captain Hooykaas (Netherlands) said that one of the chief factors in such a formula was the atmospheric conditions and these of course would be different for each country.

Commander Warburg (Great Britain) did not think that conditions in Belgium differed very much from those in Holland and the North coast of France; therefore, he said, if Belgium sent no observations, and the Dutch and French observations were available, the Bureau could work out data for the Belgian lights.

Commander Croissandeau (France) quite agreed with Commander Warburg's point of view. Moreover, the French Lighthouse Service had stated that there was a connection between the 50 % and 90 % ranges, a connection which was in proportion to the luminous intensity of the light. The constants on the northern coasts of France had been observed to be almost the same as those on the Dutch coasts. Therefore there was not much difficulty in applying in such a country the constants used in the neighbouring one, on condition that countries with a very clear atmosphere and those with a very foggy one were not compared.

The French Lighthouse Service, he said, considered that 3 or 4 constants would be sufficient to enable the visibility of 50 % to be extended to 90 %. It would thus be sufficient to insert in the preface the constants mentioned and the luminous intensities in order to deduce the visibility 50 % from that of 90 %, this would allow a column in the Dutch List of Lights to be suppressed.

Captain Hooykaas (Netherlands) remarked that it was not the most important thing to know who would work out this data if the Bureau did not. The most important matter was that observations should be made and, as the French Delegate said, whether the relation between 50 % and 90 % ranges could be found.

Commander Rasikotsicas (Greece) supported the idea of the French Delegate *i. e.* that the List of Lights should only have one column for the mean luminous range of 50 %; all the same he thought it would be necessary to add to the preface a table relating to the luminous power of lights, which would allow the deduction of the mean luminous range, the ranges for the atmospheric visibilities of 90 % and 10 %, which percentages correspond respectively to clear and foggy weather.

Commander Warburg (Great Britain) said that the Committee seemed to have reached an agreement on that point, and suggested that the proposal be put to the Committee.

Lieutenant-Commander Milne-Henderson (British India) seconded the proposal.

Commander Rasikotsicas also supported the proposal.

Captain Hooykaas (Netherlands) cancelled his amendment to add "for those nations who are not able to do it for themselves".

The **Chairman** reminded the Committee that some countries were doing that work already, and he thought that the Bureau might ask these countries

to make observations and to do the work if they could, but if they could not, to send the information on to the Bureau, which would do the work.

Lieutenant-Commander Milne-Henderson (British India) remarked that that was getting back to the amendment.

The **Chairman** would like the Bureau to give precise instructions as to what was to be done. This was similar to the Greek Delegate's proposal, but how was the Bureau to use the observations sent to it?

Captain Hooykaas (Netherlands) remarked that he did not quite understand what the Greek Delegate had said. The latter informed the Committee that in the next list of lights they would put the mean visibility, but before that he had said that they had no observations.

Commander Rasikotsicas (Greece) recalled that he had also said that in Greece the formula with approximate constants was applied; one could not have exact constants.

Lieutenant-Commander Milne-Henderson (British India) suggested that the point seemed to be that the Bureau should have all observations possible. Sending observations to the Bureau, he said, could not prevent any country from working out its own observations, but on the other hand, if the Bureau had all the information they would be able to work out constants for the countries which had not made their own calculations.

Captain Hooykaas (Netherlands) said that the chief point was that every body should think it advisable to get the mean visibility.

The **Chairman** said that the proposal should be read as follows: "the Conference once more recommends that every country in which the relative positions of lights and light ships allow... etc..." instead of "the Bureau proposes that every country... etc...".

This change was essential because the recommendation had already been made and would very likely be confirmed by the Conference. The **Chairman** proposed that this be put to the vote and *it was adopted unanimously*.

The **Chairman** then invited the Committee to discuss the Netherlands proposal.

"The Netherlands propose to use the following ranges of visibility for lights on coasts where the transparency of the air is much subject to changes;

- (a) for landfall lights, the geographical range with the percentage of visibility at that range;
- (b) for the other lights the mean range (distance at which the light is visible in 50 nights out of 100), if this distance be shorter than the geographical range; otherwise the latter range;
- (c) for all lights also the range for bad conditions of visibility, and to adopt for this range the distance at which a light is visible in 90 out of every 100 nights".

Commander Warburg (Great Britain) remarked that in Great Britain sufficient experience had not yet been obtained to determine the system which should be adopted; although many observations had been made sufficient data had not yet been collected.

Captain Hooykaas (Netherlands) thought that in any case **Commander Warburg** could express an opinion as to whether he thought it advisable.

This was the Netherlands proposal; they thought it advisable that everybody should do this because they had experience and France had experience and therefore they advised it.

Lieutenant-Commander Monti (Argentine) suggested that the text of the Netherlands proposal should be amended as follows: "the Netherlands propose that *the possibility* of using the ranges of visibility be studied... etc."

The **Chairman** observed that this was a question of principle which should now occupy the attention of the Committee.

Commander Warburg (Great Britain) suggested to the Chairman that if none of the States Members except the Netherlands and France had any experience in compiling this information, it was going rather far to ask them without experience to adopt the usage of other countries.

Captain Hooykaas (Netherlands) was quite sure that if Commander Warburg studied the pamphlet of M. van Braam van Vloten he would get very enthusiastic about it.

The **Chairman** asked if the Netherlands proposal should be put to the vote or referred to the various countries.

(The Chairman, Commander Baldi, having to absent himself, the Chair passed to Captain Hooykaas).

The **Chairman** said that it was unnecessary to vote on this, and that it was sufficient to make a note of the recommendations which had been made.

Commander Warburg (Great Britain) declared himself ready to accept a proposal that the system of visibility used in France and the Netherlands should be studied by other countries.

The **Chairman** said he thought the French Delegate wished to make an amendment, as he considered 4 columns too much and wished to suggest a diminution.

Commander Croissandeau (France) said he had a modification to propose. It concerned the mean visibility. Only the mean visibility had to be given. The geographical range was given in an indirect manner in the lists of lights. The range at 90 % visibility would be deduced from the range at 50 % visibility, as mentioned above, there would thus be only a single column in the list of lights.

Commander Warburg (Great Britain) asked whether that would not be found out by a study of the French system.

Commander Croissandeau (France) said that the French Lighthouse and Buoyage Service gave the visibility at 90 % and at 50 %. It was easy to deduce from this the constant common to both.

Commander Warburg (Great Britain) said that, if it were accepted that the French and Netherlands systems should be studied, all this would be found out.

The **Chairman** said that it was only that the French Delegate wanted to throw light on the relation between the visibility of 50 % and 90 %. He thought that the question might be left at this point.

Commander Warburg (Great Britain) asked if the proposal that the countries should study the systems of France and the Netherlands was going to be put to the vote. He did not particularly want it, but he thought it would meet the Netherlands point of view.

The **Chairman** said that they would take the proposal, but wished to know exactly what it was.

Commander Warburg (Great Britain) said that the proposal was that the countries interested should be recommended to study the systems used in France and in the Netherlands.

Captain Hori (Japan) said that the Japanese Delegation had received no instructions on this subject. His Delegation would merely take note of the decisions of the Conference and of the opinions expressed in the debates, in order to furnish the authorities of its country with the matters to be taken into consideration.

The following proposal was put to the vote :

" After a thorough discussion on the method given in the Lists of Lights

(range of visibility of lights) it is recommended that the countries concerned should study the system used in France and in the Netherlands".

Unanimously adopted except by the Japanese Delegation.

3. BEARINGS TO BE GIVEN FROM SEAWARD IN THE LIST OF LIGHTS.

The discussion was opened.

Commander Baldi (Italy) recalled the reservation he had made in the name of the Italian Government with a view to maintaining the system which consisted of giving the bearings taken from the shore.

He announced that this reservation was withdrawn.

Commander Warburg (Great Britain) said he thought the only thing to be done was to ask certain countries who used other methods to adopt a uniform method.

The Chairman asked if there were any countries using other methods.

Commander Warburg (Great Britain) said that there were; that Brazil and Siam still gave bearings from the light; China and Newfoundland gave magnetic bearings; and the Philippines (U. S. C. & G. S.) gave true bearings quadrantly.

Lieutenant-Commander Milne-Henderson (British India) said he thought it would meet the case if a proposal were passed that all countries should adopt the system of showing sectors of lights from seaward.

The Chairman read the proposal which was as follows:

"the bearing should be true and in degrees from 0° (North) to 360° measured clockwise and given from seaward. The bearing limits of sectors and arcs of visibility should also be given clockwise".

Lieutenant-Commander Milne-Henderson (British India) drew attention to the fact that this proposal should be read concurrently with the following: "all countries should adopt the procedure of showing the bearings of sectors of lights from seaward".

Commander Razikotsicas (Greece) proposed that, in order to render the French text clearer, it should be amended as follows: after the words "ils devraient être donnés", the words "à partir" should be added, so that it would read:

French text: "Les relevements devraient être vrais comptés en degrés de 0° (Nord) à 360°, dans le sens des aiguilles d'une montre; ils devraient être donnés à partir de la mer; les relevements limites des secteurs et arcs de visibilité devraient aussi être donnés à partir de la mer".

English text: "The bearings should be true and in degrees from 0° (North) to 360°, measured clockwise and given from seaward; the bearing limits of sectors and arcs of visibility should also be given from seaward".

The proposal, thus amended, was put to the vote and *adopted unanimously*.

Moreover, the Committee took note of the declaration of the Italian Delegation, stating that the Italian Government withdrew the reservation it had made.

4. INFORMATION ABOUT VARIOUS SIGNALS TO BE INSERTED IN THE LIST OF LIGHTS.

Sweden proposes "there should be included in a suitable place in the List of Lights the following list of names;

1. List of Lights;
2. List of International Signal Stations;
3. Lists of W. T. and D. F. Stations;

4. List of Signals regarding ice and Light Vessels ;
5. List of Submarine Signals.

In the list under 2-5, only such stations should be given as are located at lighthouses or light vessels ”.

Commander Bouveng (Sweden) remarked that the proposal seemed to have been misunderstood. It had not been Sweden's intention to add any new information to the list of lights, but only to have inserted in each list a table of contents. He called attention to the remark : “ In the list under 2-5, only such stations should be given as are located at lighthouses or light vessels ”.

Commander Bouveng said that Sweden was not in agreement with the Bureau's proposal to cancel Resolution *M*, Section III, page 35. This Resolution read :

“ That the List of Lights should include all such aids as will enable the navigator to determine direction and distance. If any light station is equipped to furnish additional information useful to the Mariner, this should be included in a remarks column ”.

Sweden thought that if that paragraph were cancelled, it would be necessary to use more books on the bridge than was now the case.

The **Chairman** said that there was a difference between the Bureau and Sweden. Sweden wanted to have all these things included in the list of lights. The Bureau would like to have them out of the list of lights. He understood that was the question.

Commander Razikotsicas (Greece) remarked that the proposal affected all the information given in the list of lights, in the remarks column. If a light were both a telegraph and semaphore station, it would be mentioned in the light column as being a signal station.

That was why it was necessary to have an appendix and to mention in a detailed Table of Contents those Lights with a semaphore station and those with a lifesaving station. This was the meaning of the proposal.

Commander Bouveng (Sweden) said that was so.

The **Chairman** asked **Commander Bouveng** if Sweden's meaning was that they merely wished to add a list of Contents to their list of lights.

Commander Bouveng (Sweden) said he was sorry if their amendment had been incorrectly translated. That was their meaning.

The **Chairman** thought the proposal might be changed to :

“ Sweden proposes to add a list of contents in the list of lights ”.

Commander Warburg (Great Britain) said he thought Sweden's proposal meant rather more than that. They had a list of lights and an index, and he thought that what Sweden wanted was that if there were a signal station at a light, it was to be given in a separate list.

The **Chairman** asked **Commander Bouveng** whether he had put the matter correctly two minutes ago. He proposed to make the Swedish proposal to read :

“ Sweden proposes to add a list of contents in the list of lights. ”.

Commander Bouveng (Sweden) said that the British Delegate understood his meaning and would explain it.

Commander Warburg (Great Britain) explained the Swedish Delegate's meaning.

The **Chairman** said that he understood then that what Sweden proposed was to add a list of Contents for the five different lists.

He asked if anyone wished to say anything further on the matter.

Commander Croissandeau (France) said that in France and in many other countries there were special books for wireless telegraphy and wireless direction-finding. An index of stations which made wireless signals would be

found therein. He asked why that should be repeated in the list of lights; in the latter would be found a reference in the following words: "See book of wireless signals".

Commander Bouveng (Sweden) said that only those countries who gave information in the list of lights should add that list.

Commander Warburg (Great Britain) asked whether it should not read: "the stations which are included in the light list".

Commander Razikotslacs (Greece) asked whether it was a question of inserting instructions or simply an alphabetical list.

Commander Bouveng (Sweden) said that there was no information at all, only the names of the stations.

The **Chairman** said the resolution would then read:

"Sweden proposes to give lists of contents of stations included in the light list under the following headings:

1. List of Lights;
2. List of International Signal Stations;
3. List of W. T. and D. F. Stations;
4. List of Signals regarding Ice and Light Vessels;
5. List of Submarine Signals".

Commander Croissandeau (France) requested that it should be added to the Swedish proposal that this proposal did not concern nations which already had lists in books other than Lists of Lights.

Commander Bouveng (Sweden) asked if in that case full information about life saving stations would also be given in the list of lights.

Commander Croissandeau (France) replying to the Swedish Delegate's question said that in following the coast, the book mentioned the existence of the station and merely noted opposite it, in the observation column. "See book 2."

Captain Hori (Japan) wished to know why those stations only could be given which were situated at lights or light-ships.

In his opinion, it was unnecessary to retain the last paragraph of the Swedish proposal.

The **Chairman** replied that it was because the matter at present under discussion was the list of lights.

Commander Bouveng (Sweden) said that in the list of lights no other stations were mentioned than those located in the lighthouses or light-ships.

The proposal was put to the vote and *adopted unanimously*.

The **Chairman** said that the question to be first discussed was the proposal of the Bureau that:

"Resolution Section III, para. M, page 35 of the Report of Proceedings of the London Conference should be cancelled and the words "List of Lights" in Resolution Sect. V., par. C, *ii.*, page 39 should be deleted". but said he thought that the words "List of Lights" should stand.

Lieutenant-Commander Mile-Henderson (British India) remarked that he did not think that the Conference could bring about the inclusion of information in any Code of Signals.

The **Chairman** put the proposal to the vote and it was *rejected*.

5. TABULAR METHOD OF COMPILATION OF THE LIST OF LIGHTS. USE OF ENGLISH IN HEADINGS OF COLUMNS.

Sweden proposes that:

"the introduction and headings should be translated into English in such lists as are issued in languages other than English".

Commander Croissandeau (France) thought that it should be left to each nation to act as it thought advisable in this matter, and in any case nations which did not use Roman characters could not be asked to use them in lieu of their national characters.

Commander Razikotsicas (Greece) regretted he could not agree with the French Delegate. He said that in his country they chiefly used British and Italian Light Lists, and that many mariners of other countries had asked to use these books. In order that the Light List might be properly understood, the headings of the columns ought to be translated. The Greek Delegate was in favour of the Swedish proposal, but instead of saying that they should be translated into English, he would like the choice to be left to them of translating them either into English or into French.

Commander Bouveng (Sweden) accepted this modification.

Commander Warburg (Great Britain) asked if it were proposed that headings should be given in English or French in the Light Lists of all countries, or only those which did not use Roman characters.

The **Chairman** replied that it was proposed in all cases where they were in languages other than English.

The Netherlands Hydrographic Office was in favour of putting the headings and all the principal things that were given in their list of lights in English. He could quite understand that France proposed that this should be put in English or in French, but his opinion was that nine out of ten sailors knew English. He asked the Swedish Delegate if he accepted the amendment of the British Delegate.

Commander Bouveng (Sweden) explained that earlier in the Conference Sweden had found it impossible to get similar proposals accepted. They were willing to add the words "or French" to their proposal, because they believed it was better to have headings translated into French or English rather than that they should not be translated at all.

Captain Hori (Japan) announced that the Japanese Authorities intended to give this English translation for the introduction and headings of columns, but they could give no assurance as to the date when this intention would be carried out.

The **Chairman** put the Swedish proposal to the vote, as amended by the Greek Delegate :

"the introduction and the headings of columns should be translated into English or French in such lists as are issued in languages other than English or French".

This text was adopted by 7 votes to 1, with one abstention.

The following Delegations replied *Yes* :

British - India - Great Britain - Sweden - Denmark - Japan - Greece - Netherlands

The Argentine Delegation replied *No* :

The French Delegation abstained from voting.

NOTICES TO MARINERS.

1. LIMITS OF OCEANS AND SEAS.

The **Chairman** announced that "Notice to Mariners" would be discussed but he did not feel able to preside over a discussion on question No. 1: *Limits of Oceans and Seas* — as he had been called too suddenly to the Chair. Therefore he proposed to leave that question and to proceed to No. 2.

2. INSERTION OF ONE OR MORE BEARINGS FOR LOCATING POSITIONS.

Great Britain proposed that the question be discussed :

"whether one bearing and distance, with approximate position either

relative to a charted position, or by approximate Latitude and Longitude is sufficient, or whether a second check bearing should be given”.

Commander Warburg (Great Britain) said that he had instructions, in view of the Comment of the Bureau, to state that his country did not think it necessary to consider the matter.

The **Chairman** announced that as Great Britain had withdrawn its proposal, they would proceed to consider No. 3.

3. *PERIOD OF PREVIOUS NOTICE TO BE GIVEN BEFORE INSTALLATION OR ALTERATION OF AIDS TO NAVIGATION.*

Japan proposed that :

“two months’ previous notice should be given, wherever practicable, of the installation of a new aid to navigation or the alteration of an existing one”.

The **Chairman** thought the question was an important one from the point of view of Notices of Mariners and the Netherlands agreed fully with the proposal.

Commander Razikotsicas (Greece) found it impossible that this could always be complied with, and especially within that definite period of two months’ notice. He suggested saying “if possible, two months’ previous notice...”.

Captain Hori (Japan) pointed out that if Japan had proposed “two months’ previous notice” it was because, taking the distance into consideration, the information should be neither too early nor too late.

Commander Croissandeau (France) proposed saying in the French text “autant que possible deux mois à l’avance”.

The **Chairman** observed that the words: “chaque fois que cela est possible” were to be found in the French text, which should therefore be satisfactory.

This text was *unanimously adopted*.

4. *MENTION OF THE INTENTION TO ISSUE FURTHER INFORMATION ON ANY SUBJECT.*

Great Britain proposes that :

“if it is intended to issue further notice on any subject each country should adopt the procedure of mentioning this fact in the first or preliminary notice”.

Commander Warburg (Great Britain) explained that he was instructed that as a corollary to the British proposal, it was desired to secure the endorsement of the Conference that, where changes of a temporary character or a change intended but not already made were announced, and there is no intention of issuing a further Notice on the subject, that fact should also be stated. Lights were sometimes changed temporarily, and it might be stated that the change would last for a week, but it was frequently not stated in that notice whether a further notice would be issued when the light was back in its permanent condition or whether such notice was a final one, and it was desired that such information should also be given.

The **Chairman** said apparently it was intended to put in the Notice to Mariners: “no further notice shall be given”.

The proposal was *unanimously adopted*.

5. *NOTICES OF A TEMPORARY NATURE.*

Great Britain proposes that :

(a) Notices of a temporary nature should be so marked by each country and

(b) that each country should issue monthly a list of temporary Notices still in force ”.

Lieutenant-Commander Monti (Argentine) said that the Hydrographic Service of his country published a temporary list, but only once a year.

The **Chairman** stated that Holland issued a list every month.

Captain Hori (Japan) said that in his country this publication was made every three months.

Commander Croissandeau (France) had no objection to make to paragraph (a) ; as for the list of temporary notices mentioned in paragraph (b), it seemed that it would never be up to date when the navigator received it, and in consequence would be of little use.

The **Chairman** said this observation could be applied to all Notices to Mariners.

Commander Razikotsicas (Greece) said that the Greek Delegation approved proposal (a) ; as for proposal (b) it did not consider it necessary. However, if the majority accepted the last proposal, Greece would do all that was possible to put it into force.

Commander Warburg (Great Britain) said he would like to point out one very great advantage of the proposal. Many countries, when they issued notices of a temporary character, did not say for how long the temporary condition would exist and they did not issue a new notice saying that the temporary condition had ceased to exist. It therefore frequently happened that there were doubtful cases—whether a temporary alteration had ceased to exist or was still in existence. The issue of a monthly list of temporary notices still in force would automatically do away with that doubt.

The **Chairman** said he quite agreed with the Delegate of Great Britain. The Netherlands followed that system and they found it very useful. He hoped the French Delegate would reconsider the question.

Commander Croissandeau (France) having heard the British Delegate say that the list was useful because many Notices to Mariners did not say when the temporary condition had ceased to exist, said that after the proposal had been voted according to the previous arrangement, the list of temporary Notices would be superfluous.

Commander Warburg (Great Britain) said if it were definitely stated in each temporary notice that the alteration would last for a definite period, say 6 weeks, and that no further notice could be given, then there would not be so much need for paragraph (b) ; but that system did not obtain, at present, and he was very doubtful, in spite of the proposals made, whether every nation would immediately adopt and carry out the suggestion regarding temporary notices; therefore he thought that the monthly list was of considerable importance.

The **Chairman** said he would like to add that the suggestion could not always be carried out, as it could not always be stated definitely how long some temporary changes would last.

Captain Hori (Japan) asked whether paragraph (b) should not be amended, by replacing the word “ monthly ” by the words “ periodically according to conditions ”.

Commander Warburg (Great Britain) replied that “ according to conditions ” might mean that in some periods of the year, notices might be issued weekly and at others only after an interval of 6 months. It was necessary to know when to expect the notices.

Captain Hori (Japan) said that he meant “ according to conditions in each country ”.

The **Chairman** asked what conditions.

Captain Hori (Japan) replied “ the amount of material or facilities for publication ”.

The **Chairman** did not think that the facilities for publication and the amount of material should have any effect on it. He then put the two parts of the proposal to the vote.

Paragraph (a) was *unanimously adopted*.

Paragraph (b) was *adopted* by 5 votes to 3.

The following Delegations replied *Yes* :

Denmark - Sweden - Great Britain - British India and the Netherlands.

The following Delegations replied *No* :

Japan - France - Argentine.

Greece abstained from voting.

6. *DISSEMINATION OF NOTICES ABROAD.*

The Bureau proposed in Circular Letter No. 26 H of 1924 :

(6) " that every country giving information with reference to the whole world should send all notices to its national Consular Offices in the principal ports abroad, and that these should be held at the disposal of captains of vessels who desire to consult them ".

Commander Croissandeau (France) said it was not quite clear whether only those countries which published information relative to the whole world were referred to in this article. It would be useful for a captain to be able to find Notices to Mariners of the country of the port arrived at, direct from that country rather than they should have to pass through the intermediary of his own country.

Recommendation (6) in order to be efficacious should be put as follows :

" That every country should send the original Notices to Mariners published by itself, to the principal ports at home and abroad, and that these Notices should be held either by the Pilotage Service or by a Central Bureau at the disposal of captains who desire to consult them. It would be the business of every country to create the Central Bureau, where these Notices could be consulted. Each country should convey the names of the ports where this Service exists to the knowledge of Mariners by means of its Notices.

" Foreign Hydrographic Offices should send their Notices to the above Service ".

Commander Bouvang (Sweden) said that the Bureau had made a proposal which would be found in the Supplementary Proposals, which he believed changed paragraph (6).

The BUREAU proposes :

" that those States Members which regularly issue Notices to Mariners to their Consular Representatives in the various maritime ports of the world, should urge upon such representatives the desirability of their coming to an agreement locally with other representatives receiving similar notices from their States to turn all such notices over to some central office, such as the Harbour Master, Customs Officer or other Port Authority, Chamber of Commerce, or Shipping Bureau, etc., in order that all such notices received at that port shall be accessible in one central place to the ship captains of all nations, thereby ensuring the maximum benefit to mariners.

Commander Warburg (Great Britain) said although a proposal of this nature might be desirable, it was obviously not the function of the Bureau to consider the duties of Consular Offices or to make such conditions compulsory. The sending of Notices to Consular Offices might involve a change in the duties of Consuls with which they were not concerned. He failed to see the value of discussing the proposal.

The **Chairman** said he would like to say that he agreed with the French Delegate in so far as to ask why the Bureau said in its proposal that only those nations who gave information regarding the whole world should send

Notices to Mariners to their foreign ports. He quite agreed with the amendment of the French Delegate and he also agreed with the British Delegate that they should not express an opinion as to where the Notices to Mariners should be available. In his opinion, the Hydrographers of each State ought to arrange a central place in the important harbours of their own countries. In any case, it was not for the Bureau to arrange this but for the Hydrographic Offices of each nation. The Netherlands sent their Notices to Mariners to their consuls, and they published twice a year in their Notices to Mariners, the Consulates where such Notices were to be found. It would eventually be very desirable that there should be one centre in every port where all the Notices to Mariners could be found. The main question was, however, that every country should send Notices to Mariners to ports abroad and that these should be held at the disposal of Captains of vessels who desired to consult them. He asked if the British Delegate agreed with him on this point.

Commander Warburg (Great Britain) replied that in principle he agreed, but it was a very involved question and it was not the function of the British Hydrographic Department to issue Notices in ports abroad, except in naval stations; therefore he preferred not to take part in the discussion and he would not vote on it.

The **Chairman** said that that did not prevent him from expressing an opinion on the subject and bringing it before the competent authorities.

Commander Razikotsicas (Greece) declared himself in agreement with the proposals, but wished that those States which did not publish information for the whole world should only send *original* Notices to Mariners. Thus, the Greek Hydrographic Service published two kinds of Notices; Notices to Mariners for the use of Greek sailors, and also *original* Notices to Mariners, which were also published in foreign languages. For the latter Notices, the Greek Delegate accepted the proposal which had been made.

Commander Croissandeau (France) explained that the Greek Delegate called *original* Notices those which concerned his own country only.

The **Chairman** asked if there was a delegate who understood why the Bureau's proposal applied solely to countries which published Notices to Mariners for the whole world.

Commander Razikotsicas (Greece) said it was doubtless because they were the most used.

The **Chairman** proposed to amend paragraph (6) as follows :

" that each country should send all its Notices to Mariners to some place in the principal ports abroad and that these Notices be kept there at the disposal of captains of ships who wish to consult them ".

Lieutenant-Commander Monti (Argentine) said that the principal ports would have to be enumerated.

The **Chairman** said that it was useless to put " in all ports " because no country would do this.

Commander Croissandeau (France) thought that every National Service would first have to install in certain ports a national service where original notices could be consulted, and it was for the National Services to announce to which ports they wished the original Notices to be sent.

The **Chairman** said he did not think that point should come before the sending of the Notices to the principal ports abroad. He thought it would be a very good thing if every nation would arrange matters in that way; but in the meanwhile they could begin to send the Notices abroad as the Netherlands had done for several years past.

Commander Razikotsicas (Greece) asked whether a proposal or a

recommendation was intended. He expressed the opinion that it would be best as a recommendation.

The **Chairman** put the following text to the vote in the form of a recommendation :

" that each country should send all its Notices to Mariners to some place in the principal ports abroad and that these Notices should be held at the disposal of captains of ships who wish to consult them."

This proposal was adopted by 4 votes to 2 with 3 abstentions.

The following Delegations replied *Yes* :

Sweden - Netherlands - Greece - Japan.

The following Delegations replied *No* :

Argentine - France.

The following Delegations *abstained* from voting :

Denmark - Great Britain - British India.

Commander Warburg (Great Britain) said he wished to say that on page 101 of the Report of " Work done by the Bureau " it was stated that Great Britain already sent notices to its consular offices abroad, at which offices they could be consulted by Mariners ; but it was not the Hydrographic Department which did that.

The **Chairman** read proposal (7) :

" that it is essential to make such consultations compulsory. Until this is effected, the Representatives of the States Members should bring the question before their National Marine Boards, and impress these Authorities with the importance of these consultations ".

The **Delegates of the Netherlands** and **Argentine** said that it was impossible for them to make such consultations compulsory.

Commander Warburg (Great Britain) said it was certainly impossible for Great Britain to do so.

Lieutenant-Commander Milne-Henderson (British India) said that that was also the case in India.

The **Greek Delegate** said it was difficult, not to say impossible.

The **Japanese Delegate** thought that this was outside the province of the Bureau. If voted upon, Japan would vote *No*.

The **Chairman** said that it was the opinion of the Committee that it was impossible in almost all countries to make these consultations compulsory.

Commander Warburg (Great Britain) suggested that it would be better to state that the Committee thought the question outside its competence.

This proposal was put to the vote and carried unanimously.

The meeting adjourned at 0030.

CHAPTER X.

The third meeting of Sub-Committee "D" was held at 0900, on Monday, 8th November 1926, Commodore Reinius in the Chair.

The Chairman declared the Meeting open.

7. ENGLISH TRANSLATION OF THE FIRST NUMBER OF NOTICES TO MARINERS.

The Bureau proposes:

"that the information as to the arrangement of Notices to Mariners, given in the first number of the year, should be translated into English and printed in Roman characters, in addition to that in the national language".

The Chairman proposed that the first number of Notices to Mariners should be translated into English or French, and printed in Roman characters, in addition to that in the national language.

He declared the discussion open.

Lieutenant-Commander Golemis (Greece) agreed.

Lieutenant-Commander Monti (Argentina) did not agree.

Captain Hooykaas (Netherlands) asked if he correctly understood that by "French or English" it was meant that e. g. the French Notices to Mariners would be accompanied by an English translation.

The Chairman replied No, and asked if there were any further suggestions.

Lieutenant-Commander Golemis (Greece) said he was in agreement that French should be put on the same footing as English, but he did not think that the result reached would be very useful, because it would be difficult for mariners to use further numbers of Notices to Mariners, as in order to use them they would require a certain knowledge, if not a perfect knowledge, of the language in which they were drafted.

The Chairman asked if the discussion was ended.

Captain Hori (Japan) said that the Japanese Delegation was in perfect agreement with the proposal as suggested. He wished to add that the Japanese Admiralty was doing all it could to make their documents intelligible to mariners of other nationalities.

The Chairman asked if the discussion was finished.

Captain Hooykaas (Netherlands) only wanted to say that he preferred the proposal of the Bureau to the amendment of the Chairman.

The Chairman said there were two proposals, that of the Bureau and his own.

(A vote was taken).

The proposal of the Chairman was adopted.

8. TABLE OF NAVIGATIONAL WARNINGS IN THE INTERNATIONAL CODE OF SIGNALS.

(The Chairman read the proposal of the Bureau).

The BUREAU suggested that:

"the next International Hydrographic Conference should appoint a Committee to draw up and propose the insertion of a suitable table of navigational warnings (by W.-T) in the International Code of Signals."

The Chairman opened the discussion,

Commander Haselfoot (Great Britain) said that this matter was outside the competence of the British Delegation and he also considered it to be outside the competence of the Bureau. The British Hydrographic Department issued as a separate annual publication a List of Wireless Signals which included details of weather bulletins, storm and navigational warnings, etc.,. It was considered that the International Meteorological Committee was the body best equipped to deal with any questions of standardisation of navigational warnings. So he thought it was not a matter for the Bureau.

The Chairman proposed that the Committee should refer this question back to the Bureau for re-consideration.

M. de Vanssay (France) supported the Chairman's proposal.

Lieutenant-Commander Chordasich (Yugoslavia) supported the British point of view.

Captain Hooykaas (Netherlands) said it was desirable that they should add to that the understanding of the meeting as to the proposal of the British Delegate.

The Chairman thought that the Bureau would have the minutes.

Captain Hooykaas (Netherlands) said it would be desirable to vote, so that the Bureau might know whether many or few of the Committee agreed to it.

The Chairman asked if the discussion was ended, and said that there were two proposals, Commander Haselfoot's, that this question was not within the competence of the Bureau, and his own proposal that the question should be referred back to the Bureau for re-consideration.

(A vote was taken).

The proposal of the Chairman was adopted.

LIMITS OF OCEANS AND SEAS. (cont.).

The Chairman asked if the Delegates thought it practical now to take Point 1 in Notices to Mariners: *Limits of Oceans and Seas*.

M. de Vanssay (France) pointed out that up to date the Bureau had been unable to propose limits which would be adopted by all interested countries, but the Bureau might be requested to carry this study further and try to find some limits, if not all, which might be accepted by all countries interested.

The Chairman fully agreed with M. de Vanssay and proposed that the Committee should request the Bureau to study the question with a view to finding a solution either total or partial.

He asked if there were any further suggestions.

Commander Haselfoot (Great Britain) thought it was rather a diplomatic question than a question of Hydrography and said he must still argue, in accordance with the views already expressed by the British Hydrographer, that any attempt to carry out the proposed standardisation would be an infringement of Article 7 (b) of the I. H. B. Statutes.

The Chairman could not see that it could be a diplomatic question if the Bureau tried to find boundaries for seas for Hydrographic purposes only.

Lieutenant-Commander Milne-Henderson (British India) remarked that Article 7 (b) of the Statutes said that the Bureau "shall never deal with any subject which involves questions of international policy". In his opinion, and in the opinion of the Indian Government, this was a matter of international policy. But the great difficulty in giving names, apart from other things, to all these various limits was that names would have to be given which would be accepted internationally by everybody. Personally, he was instructed by

the Government of India to say that though this was not a matter that the Bureau could deal with advantageously, they could at the same time see the possibility of some international agreement being come to, but that was a diplomatic matter and one that was outside the competence of this Bureau.

Captain Hori (Japan) said that the Japanese Delegation supported the views of the British and Indian Delegations.

Lieutenant-Commander Golemis (Greece) said that he would like to ask whether the point would be met if the words "for hydrographic purposes only" were inserted.

The **Chairman** said that was his proposal, that it be limited to hydrographic purposes only.

Captain Hooykaas (Netherlands) agreed with the Chairman.

The **Chairman** asked if the discussion was finished. He said there were two proposals, one that of the British Delegate, who found this question not to be within the province of the Bureau, and the proposal of M. de Vanssay, which was that the Bureau should study the question and try to get a solution either total or partial for the limits of Oceans and Seas.

(A vote was taken).

The latter proposal (that of M. de Vanssay) *was adopted* (6 votes against 5).

Captain Lopes (Portugal) wished to draw attention to what must be a clerical error on p. 33, paragraph 4, where it stated "the geographical range (without any indication) is given by Portugal and Sweden; the geographical range in average weather conditions by Argentine and Denmark". It should be altered to read: "the geographical range (without any indication) is given by Sweden" (and *not* Portugal) "the geographical range in average weather conditions by Argentine, Denmark and Portugal".

The **Chairman** closed the Session.

The meeting rose at 0945.

RESOLUTIONS PROPOSED
by the
COMMITTEE ON CHARTS AND TECHNICAL DOCUMENTS. (*)

I. — RESOLUTIONS CONCERNING CHARTS. (*)
(Committee on Charts and Technical Documents) (*).

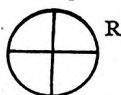
I. SYMBOLS.

(A) PUBLICATION OF INTERNATIONAL LISTS OF SYMBOLS AND ABBREVIATIONS.

"The Committee considers that the Bureau should prepare an International lists of symbols and abbreviations exclusively for the use of mariners, and also another list of Symbols and Abbreviations for the use of cartographers."

(B) SYMBOLS TO BE USED ON CHARTS FOR WIRELESS STATIONS.

The Committee adopted the following symbol and letter :—



Neither symbol nor letter should be coloured.

The German proposal, the text of which will be found in the Report of the Committee, might be used as a basis for classification and terminology for completing the abbreviation *R*, when considered necessary.

(C) SYMBOLS FOR SUNKEN ROCKS :

The Committee decide to use the symbol for sunken rocks of small area (pinnacles), to a depth of 10 metres, the depth being indicated by a number placed at the side of the symbol, as follows :



(the numeral should be of a different printing type from that of the soundings of the chart).

(D) SYMBOLS AND CONVENTIONS FOR WRECKS ADOPTED BY THE COMMITTEE.

I. Wrecks which lie in a position where the depth of water exceeds 110 fathoms (200 metres) will not be shown on the chart.

(*) N.-B. — The Resolutions mentioned under the Headings I, II, III, IV and Va, referring to Charts, Sailing Directions, Light Lists, Notices to Mariners and Catalogues were not discussed by the Conference in Plenary Session. They form the final Report of the "Committee on Charts and Technical Documents", which, by a decision of the Conference, should be submitted to those interested, requesting them to make their observations on the subject. As soon as the Bureau has received these observations they will be sent to the States Members.

2. In positions where the depth of water does not exceed 110 fathoms (200 metres), wrecks will be classified and charted as follows :

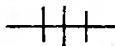
(a) Wrecks showing a portion of the hull or superstructure above low water will be shown on all appropriate charts by the followings symbol without the word Wreck or the date.



(b) Sunkn wrecks which are dangerous to surface navigation will be shown thus :




(c) Sunkn wrecks which are not dangerous to surface navigation will be shown thus :



The limiting depth being 8 fathoms or 15 metres

(d) Remains of a wreck no longer a danger to surface navigation, but to be avoided by vessels anchoring or trawling, will be shown, on the largest scale chart only, by the symbol :—

 foul. { or the translation of the word
foul in the language desired,

(This last proposal received an equal number of votes, 7 for and 7 against It was referred to the Plenary Session).

3. On the largest scale chart, the date (year) of the wreck will be inserted when known, if the clearness of the chart is not affected thereby.

4. On smaller scale charts, wrecks will not invariably be shown in the waters covered by larger scale charts, except when they are dangerous to navigation. When necessary, a note to this effect will be inserted on the chart.

5. Doubtful wrecks will be marked on large scale charts with the notes "E. D.", "P. D.", or "P. A.", which signify: "Existence Doubtful", "Position Doubtful" or "Position Approximate" as necessary, in order to differentiate them from wrecks the particulars of which are authentically known.

6. The position of the centre of the wreck will be indicated in the case of 2 (a) by a small circle on the water-line at the base of the mast; in the cases of 2 (b) and (c) by the intersection of the horizontal line and the middle vertical line, whilst in the case of 2 (d), it is the centre of the dotted circle.

7. Dangerous wrecks should be shown on all appropriate charts taking due account of the scale. It is evident that such wrecks cannot be shown on very small scale charts.

(E) DEPTH CONTOURS.

1. "As various proposals have been made by the Bureau and by FRANCE, PORTUGAL, and GERMANY, the Committee proposes that the Bureau should be requested to examine the question afresh and to submit new proposals to the States Members and notes that no objection has been raised against the advisability of making the symbols for depth contours the same for all countries."

2. Several Delegates considered that the five-metre line should be simpler and heavier than the others, because it is the most important. This recommendation is referred to the Bureau.

Besides, the Committee considers preferable to settle on a certain number of lines, but not all, so as not to make the number of symbols too great.

3. "*General Danger Line*". The Committee adopted this term.

There is no objection to the adoption of a "general danger line" to enclose a part of the sea which navigators should avoid altogether on account of the great number of obstacles to navigation. Some nations have already adopted for this symbol a simple dotted line, similar to the 1 metre contour, because it is not probable that the former will be mistaken for the latter and, should this happen, it would not involve danger.

1 metre or general danger line.

4. The Committee decided that no figure should be shown against the lines.

5. The Committee decided that it was not necessary to establish a special line to represent each metre of depth between 10 and 50 meters.

6. In view of the fact that the Committee has accepted the principle that each country will use those lines only which seem to it the most convenient, it was not necessary to discuss the advisability or the non-advisability of introducing the three metre-line.

7. There is no objection to the insertion of dotted lines between the other lines, to represent half metres; but it is not advisable to prescribe this procedure and it should be applied only when absolutely necessary.

8. The Committee took note of the comment of the Bureau in reply to the proposal of the British Empire.

GREAT BRITAIN'S proposal was:

"The adoption of a more convenient symbol for the 6 fathom line which, in its present form, is cumbersome and difficult to delineate." and the comment of the Bureau is as follows:

"The 6 fathom line, in GREAT BRITAIN and the UNITED STATES is represented by the symbol --- --- ---"

Considering that these two nations are the only ones to use that line, that the ARGENTINE does not, and that JAPAN and the NETHERLANDS, for charts of the EAST INDIAN ARCHIPELAGO, have adopted the metric system, it appears to be indicated that these two nations should come to a direct understanding between themselves."

The Committee approved the proposal of the Dutch Delegate to point out to the Bureau that it is desirable that the 200 metre and 100 fathom lines should stand out more clearly, because these lines are important both from a geological and navigational point of view,

2. INDICATION OF CHANNELS DREDGED TO A CERTAIN DEPTH.

The Committee expressed the wish :

" that channels which have been *dredged* to a certain depth should be specially indicated as such whenever the scale of the chart permits it, with a note giving the *method of dredging* and the depth.

The following information should be inserted in the Sailing Directions also : " Channel dredged, to... metres depth, in the year... "

3. COLOURING OF LIGHT SECTORS.

The Committee pointed out that :

" it is desirable that those States which can do so, should colour their charts in order to indicate the colours of the light sectors, in view of the fact that this method is practically perfect. "

4. REFERENCE TO ADJOINING CHARTS.

The Committee considered that it would be advisable to adopt the rule that the numbers of adjacent charts should be indicated in the appropriate positions, or in case of complex arrangement, a skeleton index should be given.

5. STANDARDISATION OF TITLES OF CHARTS.

The Committee on Charts recommends the followings provisions :

(1) that the geographical position should be given on plans and charts which are not graduated and that, with regard to graduated plans and charts, a simple reference as to the origin of longitudes should be given ;

(2) that the date of the survey be shown on charts ;

(3) that it be left for each nation to decide whether the names of ships and officers who took part in the survey should be mentioned ;

(4) that when a country invariably uses the metre, it is unnecessary to mention the unit of measurement of depths ;

(5) that a table of symbols need not be shown on the charts ;

(6) that magnetic variation should be omitted from the title when it is shown against the compass rose ;

(7) that whenever the projection is not Mercator's projection, this should be mentioned on the chart ;

(8) that the authority, date of surveys and foreign charts used, together with their numbers when possible, should be mentioned ;

(9) that it is recommended, for nations which do not use the latin alphabet, that an additional title of the chart should be printed in Roman characters ;

(10) that the enumeration of conspicuous objects is *desirable on large scale charts*. The question as to whether the sketches of conspicuous objects or a simple list of these should be inserted on large scale charts was decided in favour of giving the list only.

(11) that variation obtained by accurate magnetic observations, made at places near the coast and which may be useful to seamen, should be mentioned on the charts near such places or in the title. "

6. STANDARDISATION OF DATING OF CHARTS.

The Committee decided to examine the question only as to the dates which should be mentioned on the charts and not as to the part of the chart where these should appear.

The Committee approved the proposal that the month and year of publication should be inserted on charts.

The Committee approved also a proposal to insert the month and year of publication of a new edition which replaces and cancels previous editions.

The Committee rejected the motion "that reprints, without new corrections, issued between the first publication and new editions, or between two new editions in order to complete the stock, should show the month and the year with the words "no new corrections."

The Committee decided :

"that charts should be brought up-to-date to the day when they leave the Hydrographic Office ;

"that the date of correction by the Hydrographic Office should be shown on the charts ;

"that charts should bear the date to which they have been corrected by the agent who sells them after they have left the Hydrographic Office."

7. DIMENSIONS OF CHARTS.

The Committee decided :

"that all countries should be asked to quote the dimensions between the inner border lines of their charts so that full use can be made of the material when used for compilation purposes. This applies especially to charts and plans which are not graduated."

8. SEA LIMITS.

Sweden withdrew the proposal as to "the possibility and means of showing sea limits of various kinds on specially printed charts."

9. SPECIAL INDICATION OF NEW PART ON EXCHANGE COPIES OF CORRECTED CHARTS.

The Committee proposed :

"that the new part on exchange copies of corrected charts should be specially indicated by a light-blue wash."

10. INFORMATION CONCERNING DANGERS MARKED "P.D." & "E.D."

The Committee voted on the following proposal :—

"The I. H. Bureau is requested to draw up a list of dangers marked P.D. and E. D. on charts, each being accompanied by a short historical note. All States are invited to provide the Bureau with the information necessary for the preparation of the list."

No decision was reached as 6 voted for and 6 against the proposal and 1 abstained from voting.

11. *METHODS OF PRINTING CHARTS — REPRODUCTION —
COPPER PLATES, ENGRAVING AND REPAIR. (*)*

The Committee recorded the agreement of all the Delegations that States Members should send to the Bureau all possible information concerning printing and reproduction of charts, engraving and repair of copper plates as well as the application of zincography and lithography in the preparation of charts.

This decision was approved in Plenary Session.

12. *ORIGINAL CHARTS.*

"The Committee considers it of the highest importance that the question of original charts should be thoroughly examined by the I. H. Bureau in order to allow these charts to come into general use. The Committee considered it advisable that practical experiments should be carried out, by the nations concerned, in well-defined zones, where geographical circumstances allow, and the experiments should be made on the basis of the principles used by Holland in 1925."

13. *SAFETY LANES AND DANGER ZONES.*

The Committee recommended that :

"some international Organisation, which may even not as yet be formed, be urged to take up the study of the delimitation of lanes of traffic and danger zones in much frequented waters."

14. *TIDAL INFORMATION TO BE GIVEN ON CHARTS. (**)*

The Conference limited itself to

"recommending a more general use, by mariners, of methods of prediction based on the use of harmonic constants ; the information relative to tides which is to be shown on charts is left to the discretion of the various Hydrographic Offices whether or no they issue Tide Tables."

This decision was approved in Plenary Session.

15. *COPYRIGHT OF HYDROGRAPHIC PUBLICATIONS.*

The Committee expressed the wish that the resolution of the London Conference, mentioned below, should be more strictly applied in future.

"It is desirable that every Hydrographic Office should be free to reproduce, except in facsimile, all publications of other Hydrographic Offices, provided that such reproduction shall have printed on it a due acknowledgment of the original source from which it is derived."

(*) This resolution was approved in Plenary Session.

(**) This resolution was made by the Committee on Tides and was approved in Plenary Session.

II. RESOLUTIONS ON SAILING DIRECTIONS. (*)

1. INDICATION OF SOURCE AND DATE OF INFORMATION RELATIVE TO FOREIGN COASTS IN SAILING DIRECTIONS.

The Committee recommended that :

(a) " It be clearly mentioned in partly non-original Sailing Directions which publications (with the year of issue) have been used or partly used for the compilation.

(b) " for the compilation of non-original or partly non-original Sailing Directions, those issued by the country described or issued by the Government which controls that country be used."

2. PUBLICATION OF AN INDEX-CHART OF ORIGINAL SAILING DIRECTIONS.

The Committee recommended

" the publication of an index-chart of Original Sailing Directions for use with the index of original charts."

3. TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS. (**)

The Conference " considered that it would be better for the present to leave to States and Hydrographic Offices complete latitude in the drawing up of their Directions, in so far as concerns Tides, according to their usual custom and in the manner best suited to the practice of the mariners of their own nation."

This decision was approved in Plenary Session.

4. UNIFICATION OF TITLES OF PUBLICATIONS. (***)

5. OVERLAPING OF HYDROGRAPHIC PUBLICATIONS. (***)

6. USE OF UNOFFICIAL PUBLICATIONS. (***)

7. BROADCASTING OF NAUTICAL INFORMATION. (***)

III. RESOLUTIONS CONCERNING LISTS OF LIGHTS. (*)

1. ERRATUM IN THE REPORT OF PROCEEDINGS OF THE LONDON CONFERENCE OF 1919 (Section III, Sub-Section N, paragraph 2, page 35).

Lines 8 to 1 from the bottom of the page should read :

" Period is the interval between successive commencements of the phase i.e. the time occupied by the exhibition of the entire system of changes included in that phase."

(*) See Note on page 463.

(**) See Note re N° 14 page 468.

(***) NOTE. — Subjects mentioned under 4, 5, 6 and 7, which appeared in the "Supplement to the Proposals" submitted to the Conference, were not examined by the Committee.

2. RANGE OF VISIBILITY OF LIGHTS. (*)

The Conference again recommended :

" that each country in which the relative positions of lighthouses and light ships allow observations of visibility of other lights to be made, should make these observations and send the data to the Bureau, in order that the percentages of visibility may be deduced for various distances.

After a thorough discussion on the methods set out in the List of Lights under the title of " Range of visibility of lights ", it is recommended to the countries concerned to study the system in use in France and Holland."

This resolution was approved in Plenary Session.

3. BEARINGS TO BE GIVEN FROM SEAWARD IN THE LIST OF LIGHTS.

" The bearings should be true and in degrees from 0° (North) to 360°, measured clockwise and given from seaward ; the bearing limits of sectors and arcs of visibility should also be given from seaward.

4. INFORMATION AS TO VARIOUS SIGNALS TO BE INSERTED IN THE LIST OF LIGHTS.

The Committee adopted the proposal " to insert in an appropriate place in the List of Lights and only for those stations which are in proximity to lights the following lists:

- 1) list of lights ;
- 2) list of international Signal Stations ;
- 3) list of W. T. and D. F. stations ;
- 4) list of signals with reference to ice and light-vessels ;
- 5) list of Submarine signals ;

6. TABULAR METHOD OF COMPILATION OF THE LIST OF LIGHTS *Use of English or French in the Headings of Columns.*

The Committee adopted the following Resolution :

" the introduction and headings of columns should be translated into English or French in such lists as are issued in languages other than English or French."

IV. RESOLUTIONS CONCERNING NOTICES TO MARINERS (**)

1. LIMITS OF OCEANS AND SEAS.

The Committee referred the study of this subject back to the Bureau, in order to obtain a solution of the question.

(*) This resolution was approved in Plenary Session.

(**) See Note on page 463.

2. *INSERTION IN NOTICES TO MARINERS OF ONE OR MORE BEARINGS FOR LOCATING POSITIONS.*

Great Britain withdrew the proposal put forward.

3. *PERIOD OF PREVIOUS NOTICE TO BE GIVEN BEFORE THE INSTALLATION OR ALTERATION OF AIDS TO NAVIGATION.*

The Committee considered that

“two month's previous notice should be given whenever practicable, of the installation of new aids to navigation or of the alteration in those which exist.

4. *MENTION, IN NOTICES TO MARINERS, OF THE INTENTION TO ISSUE FURTHER NOTICE ON ANY SUBJECT.*

The Committee considered that :

“if it is intended to issue a further notice on any subject, the fact should be mentioned in the first or preliminary notice.”

5. *NOTICES OF A TEMPORARY NATURE.*

The Committee expressed the following wish :

(a) “that Notices of a temporary nature should be so marked by each country ;

(b) “that each country should issue a monthly list of temporary Notices still in force.”

6. *DISSEMINATION OF NOTICES ABROAD.*

1) The Committee expressed the following wish :

“that each country should send all its Notices to some centre in the principal foreign ports and that these Notices should be at the disposal of captains of vessels who wish to consult them.”

2) The Committee considered the following question to be outside its province :

“to make this consultation compulsory and in the meantime to invite the Representatives of the States Members to bring the question before their National Marine Boards, and to impress their authorities with the importance of these consultations.”

7. *TRANSLATION INTO ENGLISH OR FRENCH OF THE FIRST NOTICE TO MARINERS OF EACH YEAR ISSUED IN A NATIONAL LANGUAGE OTHER THAN ENGLISH OR FRENCH.*

The Committee was of opinion that :

“the first number of Notices to Mariners of each year should be translated into English or French and be printed in Roman characters.”

8. *TABLE OF NAVIGATIONAL WARNINGS IN THE INTERNATIONAL CODE OF SIGNALS.*

The Committee referred the question to the Bureau.

Va. RESOLUTIONS CONCERNING CATALOGUES. (*)

I. *INSERTION IN CATALOGUES OF DATE OF LATEST CORRECTION.*

The opinion of the Committee was :

" that the insertion in the Catalogue of Charts of a column giving the month and year of the latest small correction might be useful but is not indispensable."

2. *USE OF ENGLISH OR FRENCH IN PUBLICATIONS OTHER THAN THOSE IN ENGLISH OR FRENCH.*

The Committee considered that :

" the catalogues of Charts which are published in languages other than English or French should be translated into English or French in order that they may be read and understood by mariners of any nationality. The introduction, preface, headings of columns, *etc.*, at least should be translated into English or French, as is the case, for example, in the Swedish catalogue of charts."

" The Committee thought it desirable that an English or French summary be given of any publication issued by a Hydrographic Office wishing to draw attention thereto."

" The Committee decided that any interesting publication concerning Hydrography might be published in French and in English by the International Hydrographic Bureau, permission to use copyright having first been obtained from the authors".

3. *PUBLICATION OF A CATALOGUE OF ORIGINAL CHARTS.*

The Committee decided to refer the publication of this Catalogue to the International Hydrographic Bureau.

(*) See Note on page 463.

PART III.

E.

MEETINGS OF COMMITTEE

ON

TIDES.

LIST OF THE MEMBERS OF COMMITTEE :

Chairman : Ingénieur Hydrographe Général E. FICHOT.

Vice-Chairman : Lieutenant-Commander T. M. S. MILNE-HENDERSON.

Benitez, Commander	-	-	-	-	-	Spain.
Butavand, Monsieur	-	-	-	-	-	Monaco.
Hori, Captain	-	-	-	-	-	Japan.
Kawamura, Captain	-	-	-	-	-	Japan.
Luymes, Captain	-	-	-	-	-	Netherlands.
Dr. Rauschelbach	-	-	-	-	-	Germany.
Tenani, Professor	-	-	-	-	-	Italy.
Warburg, Commander	-	-	-	-	-	Great Britain.

Secretary,
Lieutenant H. BENCKER.

RESOLUTIONS PROPOSED BY THE COMMITTEE : Page 497.

RESOLUTIONS ADOPTED BY THE CONFERENCE : Part I, E, page 109.

CHAPTER I.

The first Meeting of the Committee was held at 0915, on Thursday, 4th November 1926.

The **Chairman** announced that the Meeting was open and regretted the absence of various Members of the Committee, several of whom were working on other Committees. Capt. Luymes, for instance, said that he was unable to leave the Statutes Committee where very important work was being done, but he had sent the Chairman a protest against this Committee working simultaneously with the other. The Chairman said that he would just like to mention that this was a question of organisation for which the President and the Headquarters of the Conference were responsible, not the Tides Committee. In view, however, of Captain Luymes' protest the Chairman put to the Committee whether it wished to begin on that day the work which had already been so long deferred or whether it wished to wait until Captain Luymes could be present.

(Here the Interpreter asked whether all speeches were to be translated and it was decided that there would be no need to translate from French into English, unless occasionally Commander Warburg desired translation of some particular detail, in which case he would ask for the translation. The Chairman expressed the desire that all English speeches might be translated into French).

Commander Warburg (Great Britain) asked whether it would not be possible to discuss the questions in general terms and put off voting on the resolutions to a later meeting.

The **Chairman** said that this was exactly what he was about to suggest. He observed that this meeting to-day could be limited to an exchange of views between the members present and just to a discussion of the questions on the Agenda. He thought that all the members were in agreement that the work should be limited to questions of a practical nature. The subject of tides included many difficult and scientific points with which they were not immediately concerned, what they had chiefly to take up now was the practical use of the Tables to mariners. All the Proposals before them in the book ("*Proposals made*") had been studied and the book was full of many suggestions. The Committee had looked into it already, and the Chairman thought therefore that the Committee's discussions might be comparatively short, and that only two meetings should be needed to get through this work.

He thought they might begin by investigating the points which had been referred to them by the Committee on Charts and Sailing Directions. The Committee on Charts had referred to them the proposal made by the Bureau concerning information regarding tides which should be inserted on charts.

TIDAL INFORMATION TO BE GIVEN ON CHARTS.

The Proposal made by the Bureau was the following :

"As a rule no information as to tides should be given on charts except on plan charts and this information should be based as much as possible on harmonic constants".

The Chairman asked if any one had anything to say on this proposal by the Bureau.

Commander Warburg (Great Britain) thought this proposal far too drastic. Harmonic methods would in course of time probably be introduced and they had no experience as to the value or lack of value of giving harmonic constants on charts; he thought therefore that no such proposal should be passed, but what they might say was that it was desirable that experience should be gained in the use of harmonic methods and that the nations were therefore asked to try them and to decide the question of tidal information on charts in the light of such experience.

Captain Hori (Japan) said that although the information now given on Charts was very incomplete it was better than no information, and the Japanese Delegation could not therefore agree to delete the information regarding tides.

The **Chairman** pointed out that the proposal was to leave the information as it stood at present, *i. e.* until further information became available.

Commander Warburg (Great Britain) observed that this question really carried on directly from the Resolution of the 1919 Hydrographic Conference. On page 41 of the former Report, the first Resolution *D* went into this question of tidal information on charts, and (b) of that Resolution referred to tides which were not predominantly semi-diurnal, and stated that this question was referred to the various Hydrographic Departments for further study; under those circumstances no recommendations could be made regarding tidal information. The Committee were going on from that point and the Resolution which he would like to see passed here was to the effect that this question had now been studied. In England and in Holland it had been studied, and the Bureau had also studied it and the Committee could recommend the introduction of harmonic methods for these tides and leave to the various nations the extent to which they put the information on their charts.

The **Chairman** said that what Commander Warburg had stated was correct and he fully agreed. As a matter of fact it was desirable that the methods based on the application of harmonic methods should be developed in an increasing measure, and this was what was being done, but the time was not yet ripe to put on charts a precise method of showing tides. They might perhaps keep before them this opinion given by Commander Warburg, but it would have to be clearly understood that when all the members of the Committee were present the question would again be taken up and the vote be taken only then.

TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS.

The **Chairman** put into discussion the following proposal made by the Bureau:

"That tidal information given in the Sailing Directions should be based, as much as possible, on harmonic constants".

Professor Tenani (Italy) considered that the question of information to be given in the Sailing Directions was different from that of inserting harmonic constants on charts.

This proposal referred to tidal information based on harmonic constants. What was meant was that which could be deduced from harmonic constants and which up to the present had not appeared in the Sailing Directions. As a matter of fact, certain descriptions of tides were incomplete. A recommendation of this kind was therefore quite justified.

Commander Warburg (Great Britain) pointed out that descriptions of this nature were not given in the Sailing Directions published by the British Admiralty; unusual phenomena such as bores and double high and low water

however were described. It was better to have a description of these phenomena than tidal information based on harmonic constants.

Professor Tenani (Italy) thought he understood in the proposal of the Bureau that descriptions deduced from harmonic constants were meant, not those simply expressed by these constants.

The speaker thought that the official publication of the Bureau gave, on page 48, a complete example of what could be a description based on harmonic constants.

Captain Hori (Japan) said it was too difficult to give, in the Sailing Directions, tidal information based on the harmonic constants of every port. Ports for which such information could be given were not numerous, and for most of them, there was no other way of giving that information than by the method used in the present Sailing Directions.

Commander Warburg (Great Britain) observed that this information would have to be given in the Sailing Directions for about 10,000 ports, requiring a corresponding number of pages of printed matter, a quite impossible proposition and one which would certainly not be accepted by the British Admiralty. Further, such description was not necessary, for if the harmonic constants were available the tides could be predicted; if they were not available, no description based on them was possible. The proposal was therefore valueless.

The Chairman quite agreed with this. He said that all nations published, besides their Sailing Directions, special works on tides, in which the constants were given. It would be a costly duplication, as Commander Warburg had said, to give, in the Sailing Directions, information for every port which would not be of much interest to mariners. It would be preferable to give general information as to the possible range and as to any peculiarities which the tide might have in a given place, such as bores and double high and low water. This could not be done easily by means of harmonic constants. In the Tide Tables harmonic constants would be found which could be used by theoreticians to trace the tide curve.

The Chairman therefore agreed with Commander Warburg's observations, and considered it would be better to leave complete freedom to States and Hydrographic Offices to draw up their Sailing Directions as they had been accustomed to, and in such a way as would come nearest to the method used by their seafaring countrymen.

As no delegate wished to speak on the subject, the Chairman said that the Committee would vote as soon as those delegates who had been unable to attend the Session could be present.

ENGLISH TRANSLATION OF TITLES AND ARRANGEMENT OF TIDE TABLES.

The Chairman read the following proposal of the Bureau :

" that the general indications, given in the preface or in the introductory remarks of Tide Tables, published in language other than English or in non-Roman characters, should be added in English and in Roman characters ".

Commander Warburg (Great Britain) thought that this would be asking a great deal of nations which did not use Roman characters. It would be useful, however, if the headings of pages and geographical names were translated into English and printed in Roman characters. If a translation were requested of what was here called " general indications given in the preface or in the introductory remarks of Tide Tables ", it should be understood that such information would be given in English or French, as desired by the nations concerned.

The **Chairman** quite agreed with the British Delegate. The Committee here expressed a wish especially concerning Japan and China, which nations carried out extremely interesting work on tides, and of which Europeans using languages derived from the Latin tongue were unhappily deprived. It was desirable that they should be able to profit by the very interesting work now carried out by these nations and to this effect the Committee might express the wish that Japan and China would be good enough to help us to read their Tables by translating a few words thus making them comprehensible to Europeans, as proposed by Commander Warburg.

Captain Hori (Japan) thanked the Chairman for his kind words and declared that Japan was already proceeding in accordance with the Bureau's wish.

The **Chairman** thanked the Japanese Government for having already acceded to this wish.

HARMONIC CONSTANTS REQUIRED.

The Committee then began the discussion of the following proposal of the Bureau :

"harmonic constants should be given for those coasts, the constants of which are absolutely required to obtain a satisfactory idea of the cotidal lines of the world".

The **Chairman** thought it was unnecessary to make a special proposal on this subject. Every one was certainly of the opinion that harmonic constants should be determined wherever possible. They would naturally be used both for drawing cotidal lines and for studying all the peculiarities of the tides.

He then observed that the Committee was about to discuss a proposal that all harmonic constants should be published, which proposal would therefore include the above.

Commander Warburg (Great Britain) said that there was certain information concerning harmonic constants that the Bureau had not procured, notably with reference to Novaya Zemlya and the Faeroes. Such constants existed and the tables of harmonic constants of the British Admiralty contained this information about Novaya Zemlya (page 375) and the Faeroes (page 376). The information was obtained from Russian and Danish publications which were not made use of by the Bureau.

The **Chairman** said that it would suffice for the Bureau to complete the tables.

HARMONIC CONSTANTS, TIDAL AND CHART DATUM.

The **Chairman** opened the discussion on the first part of the proposal made by Great Britain :

(A) "The use of Harmonic constants by seamen for predicting the tides of ports which are not standard ports.

1. Reasons why this method should be used.
2. The constituents which should be used and the form in which they should be given.
3. The method of predicting".

Commander Warburg (Great Britain) said that the further study of certain types of tide was recommended at the London Conference of 1919. Various Hydrographic Offices had worked on this subject and a conclusion might perhaps now be reached. This study had been made in England by the Tidal Institute of the University of Liverpool and by the Hydrographic

Department. As a first result of this study, the Oceanographical Section of the Geodetic and Geophysics Union, which met at Rome in 1922, and of the Tidal Committee of which he (Commander Warburg) was a member, passed a Resolution to the effect that harmonic constants could be used by seamen, and their use was recommended. This led to further study, and as a result this book (Section II of Part II of the Admiralty Tide Tables for 1927) was compiled. This was not a complete copy of the Admiralty Tide Tables, it was a proof of the pages devoted to harmonic constants only. As a result of this study, he came to the conclusion that the only method by which seamen could really predict tides was the harmonic method; it was well known that the luni-tidal intervals were only applicable to certain places. Tidal differences were also only applicable to certain places, and the only universal method of prediction was the harmonic. That method had this great advantage that the same method of computation could be used for every place in the world, it had a further great advantage that seamen could compute the tide with the degree of accuracy they required for the purpose in hand. If, for instance, an approximate time of high water were required and the tide, as shown by the constants, were semi-diurnal, it was merely necessary to divide κ of M_2 by 29 and add the result to the time of the moon's transit. This gave approximately the same result as the high water full and change, the retention of high water full and change was thus obviously unnecessary. Again, if prediction within a foot or two were required the less important constituents might be omitted. If exact predictions were required, all constituents had to be used. Whether approximate predictions or accurate predictions were required, the tide due to each constituent was always computed by a single method and the tides at every place of the world were always obtained by summing the constituent tides. With all other methods there would have to be variations. If the harmonic method were introduced, seamen would have only one method to learn.

The Chairman agreed with the opinion expressed by Commander Warburg. In France, up to now, the predictions of tides for the French coasts, that of Brest in particular, were usually made by a method anterior to that of harmonic constants, and it gave very precise information for Brest for instance, it having always been confirmed by observations to a close degree of accuracy. On the other hand, France used the method of harmonic constants for tides in French colonial ports, *i. e.* in Indo-China and along the coasts of Cochin-China, where the tides were somewhat intricate, not being exclusively semi-diurnal, as the tides along the French coasts of the Atlantic. Now a decision had just been taken to use the harmonic method for tides on the French coasts, Brest included, and within a year or two, prediction tables would all be based on the method of harmonic constants. The speaker said that he was unaware whether the same decision had been taken in Great Britain with regard to the coasts of that country.

Commander Warburg (Great Britain), in answer to M. Fichot's question, understood him to say that harmonic methods would be used entirely for prediction on the coast of France. They had not yet decided to use them in England, because tides in certain places were greatly affected by shallow water, and they had not yet found any harmonic method of getting over the resulting errors — this did not affect seamen but merely the accuracy of exact predictions. It was in effect found that to predict residuals of the shallow water tides, not included in the Darwinian constituents, would require several thousand harmonic constituents.

The Chairman understood that in certain cases, there might be great difficulty in introducing all the constituent waves, especially in shallow water. The harmonic method therefore could not be rigorously applied except for

tides which were not affected by coastal conditions, and by the rising of the bottom. In many cases, of course, several small corrections had to be added. At Havre, for instance, where the phenomenon of two high waters exists, it would be difficult to use the harmonic method without applying small corrections if a correct result is to be obtained, but it would be possible to use this method in France, at all ports which are on the open sea.

Commander Warburg (Great Britain) said that the question which M. Fichot and he were discussing was under examination and he had no doubt that in course of time the difficulty would be got over and of course as soon as exact methods were discovered they would be published. He added that this work was in continuation of Darwin's work, which was not completed.

The **Chairman** said that he was well aware of the work undertaken in this direction: a certain number of constituents had been added to the old Darwinian constituents to effect that purpose.

Commander Warburg (Great Britain) said that he had dealt with the reasons why this method should be used and its advantages. They now came to the constituents to be used and the form in which they should be given. He thought there was really no difference of opinion as to the constituents. The Bureau had published a book, and the British Admiralty were publishing one. They used the same constituents except in one case. There was in the Bureau's book a constituent called $2MS$, which he did not understand. He was told that it was a constituent generally known as " μ_2 ". A constituent called $2MS$ might, however, be a semi-diurnal constituent, or it might be a sixth-diurnal constituent, and theoretically the semi-diurnal and the sixth-diurnal were of approximately equal range. So that, if it were considered advisable to include this constituent, it should be more closely defined.

On examination of the Bureau's publication on "Tide-Predicting Machines", page 75, there would be seen in the column headed " $\frac{1}{2}$ diurnal", μ_2 given as $2MS$ with a range of 0.02, when the range of M_2 was 1. If $2MS$ were included, why not include L_2 , T_2 and $2N$, the ranges of which were greater?

The **Chairman** said that it is μ_2 which is referred to, and this corresponded to $2MS$. This may be seen from the Table of compared constituents to be found at the end of the special publication called "Tide-Predicting Machines".

Commander Warburg (Great Britain) said his opinion was that that constituent should not be included. It was of no value. Apart from that small point he thought most authorities agreed as to the constituents to be used. Regarding the form in which they should be given, there could necessarily be a difference of opinion about centimetres and feet, and it must of course be left to each nation to give its constants in the measurements which it used. Another point was the constant κ ; this, as defined by Darwin, was the lag of the constituent behind the equilibrium argument; it was thus an actual fact which could be not varied; unfortunately, however, certain authorities had used κ to indicate something quite different. They had used it to mean the lag behind the standard time of the occurrence of the equilibrium argument. If the Bureau's book on Harmonic Constants were looked at it would be found to be stated that the κ 's referred to local or standard time, but in no case was it stated which was referred to. This difficulty had been recognised in England.

It appeared to the British Hydrographic Department, when preparing these Tables of harmonic constants, that this question of the meaning of κ should be definitely settled by the adoption of a new symbol to indicate a phase-lag adjusted to give predictions in standard time, and further that when adjusting κ for the time used at the place, the inclusion of a correction for longitude would render unnecessary the use of such correction when predicting. The κ 's used in the Admiralty Tide tables had there-

fore been adjusted both for longitude and for the difference between local and standard time and in order that there might be no confusion the constant resulting from such adjustment had been called "g".

The **Chairman** thought also that whatever meaning might be given to kappa, it would be necessary to state whether it referred to local or to standard time. When the harmonic analysis was being made, if the tide-gauge were set to local time and if mean noon of the first of January were taken as origin for the summation of the ordinates, obviously the local kappa would be obtained, if the clock were adjusted to local time. If the clock had been adjusted to standard time and if all astronomical elements were referred to the same standard time, it would be the same in the result obtained for kappa.

He saw no objection to distinguishing all that by the special symbol κ (kappa), for local time, and by the symbol "g" for standard time, combined with difference of longitude but then it would be essential to define, in each table, the time to which these elements had been referred.

Professor Tenani (Italy) requested an explanation. He wondered, by adopting this kappa which was not the actual lag used in the publications of the Bureau and in every other publication issued up to now, whether the possibility would still be left to mariners to apply the rules already described on the direct use of harmonic constants; because, instead of the complete calculations for prediction according to the rules which **Commander Warburg** had explained in his book and which the Bureau had given in detail in its official publications, important information could often be derived from harmonic constants. It seemed to the Italian Delegate that having applied to the kappas the corrections which belonged to the astronomical arguments, the possibility of applying these rules no longer existed. For example, if the establishment of a port were required by means of harmonic constants, the kappa number of M_2 would be divided by 29 and a very useful mean establishment would be found. To-day, a kappa number was desired with a different meaning to previously, and which would give a result no longer exact with regard to the time adopted in the tables. When the difference was taken between the kappa of M_2 and the kappa of S_2 , the age of the tide was very easily found. Now this could not be done in future, because the kappa M_2 was corrected for longitude and the kappa S_2 had no correction.

This was, perhaps, said the Italian Delegate, the only objection to using the new constant "g".

Commander Warburg (Great Britain) remarked that what Professor Tenani had said was true to some extent, but not entirely. If the kappa of M_2 were divided by 29 the high water luni-tidal interval would be obtained, add that to the time of the moon's transit corrected for longitude, and the local time of high water of M_2 was found. If "g" of M_2 be divided by 29 and added to the uncorrected time of the moon's transit, the standard time of high water of M_2 would be obtained; that applied to all the constituents. If kappa were used to carry out the same process, it would be necessary to correct the time of the moon's transit for longitude and to apply the difference between local and standard time to the results to obtain standard time.

Professor Tenani (Italy) said that he had wished to speak from the practical point of view of the seaman; there was evidently no difficulty when one started, as in this case, from a very definite measurement. Calculations could always be obtained by means of the table.

Commander Warburg (Great Britain) said that he absolutely agreed with Professor Tenani on that point. It was necessary to define exactly what was given and in the past this had not been defined exactly. There was, so far as he knew, no publication in existence in which it was defined what was meant by the quantity given as kappa.

The **Chairman** observed that one could always do so. Addressing himself to Captain Luymes who had just come in, he said that so far the Committee had only exchanged views, many Delegates being still absent. Their presence was being awaited before voting.

Captain Luymes (Netherlands) thanked him and added that he reserved the right to protest in Plenary Session against the manner in which the sittings of the Committees were organised. He pointed out that four Committees had met that morning at the same time and asked how it was possible to work seriously in that way. It would be better not to begin the examination of a question than to treat it so hastily that the Delegates had no chance to express their views.

Resuming the debate, the Netherlands Delegate had to oppose the opinion of Commander Warburg. He recalled, for example, that in a book which he had himself published, he had explained the meaning of the number kappa. He supposed that the fact that the language in which the book had been published was little known outside the confines of Holland, was the cause of Commander Warburg not knowing of it.

Commander Warburg (Great Britain) said, in reply to that, that he extracted the harmonic constants for ports in the Netherlands and in the Netherlands East Indies from the "Hydrographische Tafelen" published by the Dutch Hydrographic Office and he could find no statements as to whether the kappa was a true kappa or whether it referred to standard time.

Captain Luymes (Netherlands) said that most certainly it was a true kappa, for Commander Warburg would find in the "Hydrographische Tafelen" a table containing a correction for longitude. The kappa number was the true kappa for local time. The second edition of these "Tafelen" was published in 1913. After that they had put the Tide-constituents in the different parts of their Sailing Directions. The publication written by him (Captain Luymes) and to which he referred was compiled to a great extent from different authors, as they always stood on the shoulders of their predecessors, and in this book which was published in 1919, he certainly had explained this question. Now they had new navigation tables published in Holland, and therein the kappa numbers, corrected for the longitudes, were given. At Captain Luymes' instigation, the authors had said expressly in the explanation of the table concerned that such was the case, for if one gave kappa numbers corrected for the longitude one could not use them to calculate the age of the tide without first applying, to the kappa of M_2 , the correction with a negative sign.

Commander Warburg (Great Britain) said that the only publication he had was the 1913 Hydrographische Tafelen, with many new constants written in by the Dutch Hydrographic Office and supplied to the British Admiralty by that Office in 1924 or 1925 in response to a request for the latest date.

Captain Luymes (Netherlands) observed to Commander Warburg that the British Hydrographic Department had always received the newest editions of the Netherlands Sailing Directions and that at the end of these Sailing Directions, tables could be found giving the constants. He also sent, in 1919, to the Hydrographic Office in London a free copy of his "Summary of the Theory of Tides".

Commander Warburg (Great Britain) thought that perhaps he was not quite right in his statement, it was too general. What he wished to point out was that there was a great deal of confusion and here he thought that Captain Luymes would agree, that if a book giving harmonic constants were taken up, one did not always know whether the kappa was a true kappa, whether it contained the correction for longitude, or whether it contained the correction for the difference between standard and local time — as a case in point, he had only to take up those Tables by the International Hydrographic Bureau,

in which it was stated at the beginning that the kappa numbers were given in degrees of "local or zone time", but it was not stated anywhere which were in local time and which were in zone time.

Captain Luymes (Netherlands) said that he did not know that, for he had not yet read the book. He could only say that the point which Commander Warburg raised was certainly not true for the Dutch publications, as their new navigation tables all stated what the kappa meant — whether a true kappa or a kappa corrected for longitude.

The speaker thought that the kappas mentioned in the Tables of the International Hydrographic Bureau were given in degrees of local or zone time; for places which had zone time, in zone time, and for places which did not have zone time, in local time; for instance in the Netherlands, and in their colonies, they had no zone time. But he quite agreed that it would be better if it were more definitely stated.

Commander Warburg (Great Britain) remarked that he had dealt with so many publications in the last few months, and could only say that this point had caused him much trouble; he observed that if this United States Publication (Special Publication No 98) were examined it was not stated there.

Professor Tenani (Italy) observed that the latter remark concerning the publications of the United States was incorrect. In those publications, the kappa number was given in local time and detailed explanations were given in the book on that point.

The Italian Delegate observed, however, that this question of local or zone time was but of minor importance practically, for it was a known fact that if calculations were made two or three times over for the same locality and with short period observations, the kappa number always fluctuated within the range of about half an hour.

The Italian Delegate expressed the opinion that the sentences to be found in the Bureau's publication concerning local and standard time were intended to include this uncertainty, which prevailed in almost all constants, except those resulting from long period observations.

The Chairman expressed the opinion that this discussion might be summarised by saying that, from a theoretical point of view, the meaning of the kappa number was without any doubt very easy to define. He considered, in fact, that all the authors who had written on the subject, had given a correct interpretation of it. But, from a practical point of view, where tables were given of this kappa number, the reader might certainly be left in doubt as to whether this referred to local or to zone time.

The practical conclusion of this would be that for all the tables, a clear definition of the meaning of the kappa given should not be neglected, either by the use of a particular letter, as suggested by the British Delegate — which would be an excellent thing — or by a note stating that the numbers and differences in the phases were given in local time, or any other definite time. The Committee might perhaps make a decision as to the time to which this kappa number should refer.

As a confirmation of Professor Tenani's remarks, the Chairman added that most certainly, when calculations were made from a small number of observations over a period of two or three months, it could be seen that there was sufficient uncertainty on the kappa number to allow the differences between the times in question to be left unnoticed. This solution, however, would be unsatisfactory in practice; it would be better to give the results of observations, stating to which time they referred.

Captain Luymes (Netherlands) thought that the introduction of a new letter "g", as proposed by Commander Warburg, would have the effect of confusing sailors. He would prefer not to introduce a new name, but to keep

to the word kappa, which was now tolerably well understood among a certain number of seamen. But he quite agreed with the proposal of the Chairman that it should be clearly stated in each work which kappa was meant, if local time or zone time, and whether longitude correction had been inserted or not. It should be certain which number they had in their tables. He was against adopting another letter "g" or any such thing.

Captain Crosley (U. S. A.) entered the Committee room at that moment and stated that he merely wished to present himself to make sure that the representations of the Coast and Geodetic Survey as carried by him were before this Committee. He did not wish to enter into discussion. Copies had been made and furnished to individuals and he just wished to assure himself that they were before the Committee.

The **Chairman** replied to Captain Crosley that owing to the absence of certain Delegates, the Committee had merely exchanged views, so that Captain Crosley's proposal had not yet been examined, but that it would be submitted to the Committee later.

Captain Crosley (U. S. A.) remarked that it was not a proposal. He understood that copies were here.

Commander Warburg (Great Britain) said that he had a copy, which had been given him by Admiral Niblack. They had been distributed at the first Plenary Session.

Captain Crosley (U. S. A.) said that here were three copies which he would be glad to leave, and merely requested that the views as expressed be considered. Tides would be found in it. (See: Memorandum below)

Commander Warburg (Great Britain) said that he had been given a few special pages on the tidal problems.

Captain Crosley (U. S. A.) said that that was all he wanted to do, to call attention to these papers and make sure that those views were considered.

The **Chairman** replied that due consideration would be taken of the opinion expressed by the Delegate of the U. S. A.

Captain Crosley then withdrew.

Commander Warburg (Great Britain) requested that he might say just one or two words in reply to what had been said in answer to his remarks; he would be very brief.

The **Chairman** gave permission.

Commander Warburg (Great Britain) said that he merely wished to point out that he agreed with the Chairman as to the futility of arguing on this question of kappa, but he could not agree that the meaning of kappa had been sufficiently indicated in the past. He could not agree that in the publications of the Bureau the times of predictions would be in standard times in places where standard time was used, and in local time at others, because it simply was not so. If British India were taken, for instance, standard time was kept there, but if this book were used, predictions would be in local time, because the true kappa had always been given in British Indian publications; further if predictions were computed from the constants given in U. S. Special Publication N° 98, they would generally be in local time but in some cases in standard time, and he could find no statements regarding this. Further, he could not agree that the term kappa should be used for a quantity which was not kappa. If kappa were corrected for standard time or for longitude, it was no longer kappa and could not be called kappa; again, he did not agree that the errors in the calculations of kappa from a short series of observations exceeded, or were likely to exceed, the difference due to the change from standard to local time; the difference between standard and local time in many places being an hour or more, which made a difference of 29

degrees in kappa of M_2 . If the suggested kappa was going to be 29 degrees wrong, the harmonic constants might just as well not be given. He agreed, however, that it was not necessary to discuss this matter further.

Professor Tenani (Italy) replied that the difference would always be less than one hour; it would generally be less than half an hour, which was equivalent to 14° for M_2 and to 7° for diurnal waves. The calculation tables gave an approximation of 3° , and on this point, it should be considered that, besides the errors in the constants, there were errors in the approximation, inherent to calculation which was necessarily approximate.

The **Chairman** suggested that the Committee should take a decision concerning Great Britain's proposal.

As for "*the use of harmonic constants by seamen for predicting the tides of ports which are not standard ports*", the discussion seemed to result in a unanimity in recognising the advantages shown by the harmonic method.

Observing this unanimity, the **Chairman** added that it remained to examine which were the constituent waves to be used and the way in which to give them.

The discussion concerning kappa, in the Chairman's opinion, ought to be included in this subject, as the Committee would have an opinion to express on the way in which the meaning of kappa should be given. He asked whether there were any Delegates who thought it useful to use a special letter to make this meaning precise.

Captain Luymes (Netherlands) wished to insist on the necessity of making the matter as simple as possible for sailors. The theory of tides on the basis of the harmonic method was already difficult enough for them and the use of two meanings for kappa would augment the difficulty by leading to confusion.

The British Delegate was quite right in saying that the simple kappa and the kappa corrected for longitude were not the same thing, only that was of no practical importance if it were mentioned in the Tables which kappa was used. These little differences had no real significance for sailors.

The **Chairman** recognised that the most important thing for them was to have prediction tables. He then asked if there were many sailors who used harmonic constants for determining the height of the tide.

Captain Luymes (Netherlands) replied in the affirmative as far as the Dutch Indies were concerned. Tables were to be found there, showing the exact depth calculated from harmonic constants, (*the Secretary produced some*), for every hour of the year, but this was not given for fairly unfrequented harbours. Thus, the Officers of the Paketvaart Company made calculations for other ports when necessary, using the harmonic method. If another kappa were established, it would lead to confusion.

The **Chairman** observed that these Tables for the Dutch Indies were rather special; they were besides somewhat different from the tables giving the harmonic constants, from which Tables, the only ones to be used, it would be very easy for the Dutch to take the kappa they liked, for certainly no Delegate ever wished to impose on the Netherlands any definite kappa.

Captain Luymes (Netherlands) observed that, nevertheless, universal agreement should be aimed at.

The **Chairman** agreed with this opinion and added that at least recommendations as to the best mode of procedure might be put forward.

Captain Hori (Japan) asked to be excused interrupting the debate for a moment, but he wished to make a short declaration.

He said that the Japanese delegation had prepared a short memorandum on this tide question, in English and French, to be submitted to the Confer-

ence. The Japanese Delegation thought it unnecessary to point out that its members were not specialists in this science, but simply expressed the views of their experts. In this memorandum, the experts had said all they could say and all they knew on the matter.

The Japanese Delegation begged the Chairman of the Committee to transmit to the Conference the desire of the Japanese Delegation that the contents of the memorandum should be inserted, in suitable wording and in some form or other, in the documents of the Conference, either in the reports, or as an appendix. (See: Appendix B, below).

The Chairman asked Commander Warburg if he had a concrete proposal to submit to the Committee on which it could decide.

Commander Warburg (Great Britain) replied in the affirmative, and suggested that it be merely proposed that it was desirable that the use of harmonic constants by seamen should be encouraged and that those nations who published Tide Tables should publish the constants. He thought that would meet with general agreement. It really was not much use having this talk which took a lot of time, and perhaps he should not have brought up these minor matters of detail at all. He would prefer, however, that Captain Luymes should draft the Resolution. The first nation, the seamen of which used harmonic constants, was the Netherlands, and perhaps Captain Luymes would remember that at the London Conference he (Commander Warburg) personally suggested a Resolution regarding the desirability of their general study, but other Delegates had not agreed and it was not passed. He thought a general resolution to that effect now would meet the case, and that agreement would perhaps be reached in details after further study,

The Chairman thought that such a resolution would be unanimously adopted. He then asked if any Delegate saw any objection to submitting to the Plenary Session the desire that all nations should henceforth use harmonic constants for the prediction of tides.

He observed that the Japanese Delegation had agreed in principle to proposal (4); however, it did not think it an easy matter for mariners to predict the tide by means of harmonic constants, and that, consequently, it was extremely desirable that the method of prediction by means of harmonic constants be proposed and that Hydrographic Authorities who published Tide Tables, should make every effort to perfect them, in order that mariners might obtain the most accurate predictions possible of the tide, by applying the differences of the tides to the prediction at standard ports.

He observed that this opinion formulated by the Japanese Delegation, constituted in effect an agreement in principle.

He then put to the vote the proposal as formulated by Great Britain:

(4) "The use of harmonic constants by seamen for predicting the tides of ports which are not standard ports".

Unanimously adopted.

The Chairman then observed regarding the paragraph:

1. "Reasons why this method should be used".

that these reasons had been sufficiently debated.

He then asked the opinion of the Committee concerning paragraph 2.

2. "The constituents which should be used, and the form in which they should be given".

Commander Warburg (Great Britain) thought it should be left to the various nations concerned to use their own method. It was a new idea, and it was very likely, in fact probably impossible, that the Committee could agree to any method. It should be left for further experience, and perhaps when a new Conference met they would have sufficient experience of the various methods employed to come to an agreement as to a standard method.

The **Chairman** said it was certain that in order to have accurate predictions, it would depend on the region which waves would have to be used for waves that were sufficient in some places might be insufficient in others. It was therefore very difficult to absolutely fix which waves should be generally used. The most that could be done would be to indicate the minimum number of waves necessary, which was useless because any one could find this out, and it would be superfluous to give a rule which risked being broken in many cases.

He thought that the Committee might adopt Commander Warburg's proposal, *i. e.* to leave to each Hydrographic Service the task of judging which waves were most convenient to its own country.

This proposal was unanimously adopted.

The **Chairman** opened the discussion on paragraph 3 :

THE METHOD OF PREDICTING.

Commander Warburg (Great Britain) addressing the **Chairman** said that the subject on the whole was covered by the Committee's remarks on paragraph 2. It would be too much to expect that they should come to an agreement as to the method before experience had been gained. Dr. Van der Stok's method was used in this publication of the Bureau — a different method was used in the British Admiralty publication; Captain Luymes thought his method the better of the two, he (Commander Warburg) thought the Admiralty method the better. He thought it should be left to the nations to adopt the method which they thought best, and then in years to come, when they had had experience of the various methods, they could perhaps agree as to which was the best.

Captain Luymes (Netherlands) said he had not yet had time here for studying this new publication of the Admiralty. He had only studied at home the Notice to Mariners concerned, he believed it was nearly the same thing and asked if he was correct.

Commander Warburg (Great Britain) replied in the affirmative.

Captain Luymes (Netherlands) said that in the Notice to Mariners, the British Admiralty had accepted two terms, "*e*" and "*g*". With regard to "*e*", the Netherlands used the day and year terms and the British Admiralty used the day and month terms: there was no great difference. As to "*g*", they had discussed this here already and he did not think it necessary to go deeper into that question. There was only one thing that had not been considered, and that was that by the British Admiralty method further calculations had to be made by multiplication, whereas by the Netherlands method, multiplication had been avoided. He thought the Netherlands method was certainly to be preferred and he would therefore ask Commander Warburg to consider, not immediately, but afterwards when they had more time, if there was anything to be said for his country's method. They were here, said Captain Luymes, not so much to study the methods, but to standardise, to try to come to a general and universally accepted method, so that, for instance a Dutch sailor who was used to the Netherlands method might find the same in the British Admiralty Table. This Table was much used by Dutch seamen, and it would confuse them now to see therein other annotations, other names and another method.

The **Chairman** observed that the Committee had before it two different methods, and doubtless if other national services had studied the same question, there would have been an even greater number of methods. All these methods could, from a practical point of view, offer advantages and probably a few disadvantages.

Therefore, the Chairman thought it was very difficult for the Committee to decide and he would willingly agree to Commander Warburg's suggestion, which was to wait until further experience had been gained.

Noticing that the German Delegate had just arrived the Chairman asked him if German seamen used a method of prediction anything like that of the Netherlands or Great Britain.

Captain Schweppe (Germany) was afraid he could not give the Committee very detailed information about that, because the subject was not in his province in Germany. He had sent a telegram to his expert asking him to come to Monaco and he hoped he would not arrive too late to take part in the discussions. Captain Schweppe did not think they were likely to finish to-day and he would be glad if it were possible to postpone this matter until Saturday. The Statutes Committee was sitting, and as they had a lot of work to get through and Captain Luymes and himself, who were both interested in the matter now under discussion, would have to be present at the meeting of the Statutes Committee to be held to-morrow morning. To-morrow afternoon, he understood there was a Plenary Session, so he thought the Tides Committee would probably be forced to postpone their next meeting until Saturday. By that time, his expert would be in Monaco and able to give the information desired.

The Chairman thought in fact it would be difficult to conclude that day. He therefore proposed to postpone the end of the debate to another sitting.

Commander Warburg (Great Britain) said that there was one point — he did not know whether they ought to bring it up now. There was no representative of the United States there. Captain Crosley had given them certain papers, which included the United States idea on those subjects which they had been discussing. The statement was put in a very few words, and he asked the Chairman to read it out so that the United States would see that their point of view had been put before the Committee.

The Chairman said that the Committee would have an opportunity of discussing the American proposal.

Commander Warburg (Great Britain) said that what he meant to say was that it should be noted in the report that this had been received.

Captain Luymes (Netherlands) was anxious to point out that this proposal had not been handed to him, and that besides the Delegates were so overworked with too many sittings that he had had no time to consider the proposal in question.

Commander Warburg (Great Britain) said that the papers had been given out at the first Plenary Session.

Captain Luymes (Netherlands) said that he had not received one.

Commander Warburg (Great Britain) said that he had received one, and suggested reading it out to see what was said.

The Chairman said that the proposal had been laid on the table of the Committee, in order that each Delegate might digest it.

Captain Luymes (Netherlands) thought it would be best if Commander Warburg, who understood the proposal, would explain it.

Commander Warburg (Great Britain), after examining the paper left by Captain Crosley, said he could not understand this. Nobody seemed to have it except himself. The paper left by Captain Crosley was not the tidal paper given out at the first Plenary Session when he himself had received a copy. He proposed that the document be reproduced and distributed to all the members of the Committee.

The **Chairman** said that this would be done and proposed that the discussion be adjourned to a date which would be arranged by the Headquarters of the Conference.

Captain Luymes (Netherlands) asked that in future the Members might be informed of Committees about to sit, because he knew nothing of the sitting which had been called this morning. He thought this showed a lack of organisation which would be injurious to good work. He was anxious that this remark might be inserted in the Report in order that the necessary steps might be taken.

The **Chairman** said that the time of this meeting had been put on the Notice Board in the Hall of the Bureau.]

The sitting adjourned at 1150.

CHAPTER II.

The second Meeting of the Committee was held at 0900, on Monday, 8th November 1926.

The **Chairman** welcomed Dr Rauschelbach the German Tidal expert telegraphed for by Captain Schweppe, whose knowledge, he said, would be very useful for the examination of the questions which the Committee would have to solve.

The **Chairman** recalled that the Committee had decided to treat all these questions not so much from a theoretical but mainly from a practical point of view.

The speaker then summarised the work carried out during the previous sitting.

As no one wished to make any observations, the **Chairman** proposed the following resolution :

METHOD OF CLASSIFICATION OF TIDES.

" The Committee on Tides expresses the wish that a system for classifying various types of tides, taking into account at the same time both the ratio of amplitudes of the semi-diurnal and diurnal constituents and the differences of epochs of same, should be studied by the various States Members and submitted to the approval of the next Conference ".

The **Chairman** recalled, in order to justify this proposal, that the classification of Van der Stok now existed, a classification which was probably insufficiently complete, for the character of a tide composed of a diurnal and semi-diurnal wave was not exclusively due to the ratio of amplitudes of these two constituents; the difference of epoch had a great effect on it. With a scale of classification like that of Beaufort in meteorology, which would be informative both as to the ratios of amplitudes and the irregularity of the waves, the character of the tide could perhaps be roughly shown in the region in question. The investigation to be made, rather protracted it was true, could be carried out either by the States Members or by the Bureau and be a subject of discussion at the next Conference. If agreement could be come to as to the adoption of such a scale, the indications to be put on charts would follow naturally. A sequence number, or a letter with an index number would give information both simple and sufficiently precise for seamen.

Captain Luymes (Netherlands) said that from a theoretical point of view, it seemed to him that the study would be rather difficult.

The **Chairman** replied that that was why he had suggested proposing a wish, in order that the question might be studied and that the results might be discussed at the next Conference.

Professor Tenani (Italy) asked the **Chairman** if this information ought to be inserted on charts or in Sailing Directions. He pointed out that the Bureau's proposal, relating to the Sailing Directions was very similar to the **Chairman's** proposal. He thought it would be difficult to put this information on charts.

The **Chairman** thought that one could have a symbol, meaning, for

example, that the tide was of a diurnal type with an amplitude more or less determined, and other symbols which were still to be discovered, leading through the semi-diurnal type to the mixed type and finally to the diurnal type, or as it were a progressive scale. But without doubt the question could not be solved immediately. By having about ten different classes in those three large categories, which would give information as to the irregularity of the waves, one would probably get a mean which would give an idea of the curve of the tide in the region.

Commander Warburg (Great Britain) observed that, at the present time tidal datum given on the charts were often of little value. He did not agree with the classification of Van der Stok, for a "mixed" tide could be either diurnal or semi-diurnal, or a "diurnal" tide mixed; the type, in fact, depended on the relation between both H and κ of the semi-diurnal and diurnal constituents, not on each only. What the navigator wanted was the height of the tide and this could be computed from the harmonic constants.

He thought, therefore, that for the moment, they should content themselves with recommending the general study and use of harmonic constants.

Captain Luymes (Netherlands) recalled that the Van der Stok method of classification simply aimed at being useful for general investigations. If a mariner were told that the tide was of a mixed type, it would be really of very little use to him, but in the Dutch Sailing Directions more complete information was given which allowed the mariner to work out, in a very short time, the tide for any day desired. This method had been used to give an example for a port in Java, and the application of the method had only given rise to an error of one decimetre in the level and one or two hours in the time, compared with accurate calculation. The speaker told the Chairman that he would send him a draft of this example.

As for the study of the classification of the tides, Captain Luymes informed the Committee that the Professor of Nautical Instruction in Holland, Mr. van Roon, had discovered a very simple rule allowing the constant difference of time between the tide, either high or low, of the constituent M_2 , and the spring tide of the diurnal group to be worked out.

Here was the rule:

Phase M_2 = phase K_1 + phase O + κK_1 + κO — κM_2 ,
which was reduced to:

$$\text{Phase } M_2 = \kappa K_1 + \kappa O - \kappa M_2$$

when the phases of K_1 and of O were zero or 180° , *i. e.* at the times of high water and low water of spring tides of the diurnal group.

The **Chairman** said that he was in entire agreement with Captain Luymes' observations, *i. e.* that the classification of Van der Stok could only be used to give general information. The proposal which he had just made consisted in augmenting the Van der Stok method so as to take into account all the elements on a rather more precise manner, and thus satisfy Commander Warburg's desiderata. It would be a way of inserting quite simple information on charts, based solely on the harmonic method. This would enable sailors to obtain information at a glance, rough it was true, but sufficient probably for most cases of the type of the tide in the region in which they found themselves.

Commander Warburg (Great Britain) asked if the Committee was now dealing with the portion of the "Proposals" to do with charts or that to do with Sailing Directions.

The **Chairman** replied that in his opinion this proposal could apply to both.

Commander Warburg (Great Britain) thought it was difficult to discuss both questions at the same time. The Committee, in the course of the last sitting, had been of the opinion that it could not accept the proposals of the Bureau which said that the information on Tides should not appear on charts, but, on the contrary, in the Sailing Directions.

The **Chairman** said that as for charts, the Committee could maintain the views expressed at the last meeting, *i. e.* that the question was considered as insufficiently ripe for a suitable type of general information to be agreed upon, before a more complete dissemination of the harmonic methods had been effected, leaving to each Navy the choice to put on its charts the information considered useful.

Commander Warburg (Great Britain) thought that a special mention should be made of the advantage to be gained by studying harmonic methods in a more general manner, rather than talking of diurnal and semi-diurnal waves as suggested by the **Chairman**.

The **Chairman** proposed the following Resolution to the Committee :

" That the Committee on Tides merely recommends to the Conference a more general use by seamen of the methods of prediction based on the use of harmonic constants ".

Dr. Rauschelbach (Germany) declared himself in agreement with this proposal.

Commander Warburg (Great Britain) recalled that when this question had been discussed for the first time in London, in 1919, it had been decided as follows: " For tides not predominantly semi-diurnal, it is recognised that the giving of useful tidal information on the charts is a matter of great difficulty. Under these circumstances no recommendations can be made regarding tidal information to be given on charts ".

Under these conditions, it would be preferable for the Committee to recommend the adoption of harmonic methods, but it should be left to each State to decide the moment and the method for the application of this system. Thus, by the time of the next Conference, a greater number of States would have used this method and it would then be possible to reach a more general agreement.

The **Chairman** thought that every one was in agreement with this suggestion.

The Committee approved it unanimously.

The **Chairman** said that with regard to the Sailing Directions, the Committee had expressed a similar opinion. It had been pointed out that if description of the type of tide, based on harmonic constants, had to be given for every port, very lengthy descriptions would ensue, and it would make the Sailing Directions considerably bulkier. The conclusion had been reached that it would be preferable just to give a very general, and as it were plastic, description of the phenomenon in the Sailing Directions as well. This had seemed all the more rational as, besides their Sailing Directions, most States published harmonic constants for all ports where they had been able to determine them, books which could inform navigators more completely as to local tides.

Captain Luymes (Netherlands) thought that full liberty should be left to States to insert in their Sailing Directions such descriptions of tides as they considered useful.

The **Chairman** declared that this was certainly his opinion, and referred to a previous decision on the subject which he read out.

The draft Resolution being put to the vote was adopted unanimously.

THE USE OF HARMONIC CONSTANTS BY SEAMEN FOR PREDICTING THE TIDES OF PORTS WHICH ARE NOT STANDARD PORTS.

The **Chairman** recalled that this question had already been studied during the last meeting. The result of this discussion was that it was considered impossible, at least for the present, to impose this method and that it should be left to each National Service to teach and to diffuse this method based on harmonic analysis.

Dr. Rauschelbach (Germany) pointed out that the Deutsche Seewarte, which had published the Tide Tables only since 1920, had no knowledge of the proposals made in 1919. That was why it had been unable to introduce this harmonic method among German Seamen and have experiments made by them. It seemed to him, however, that this method was good and that it would be wise to adopt it.

M. Bencker (Secretary) pointed out that, in her memorandum, Japan had declared herself in favour of this method while the United States preferred on the contrary to keep to the system now in use in their country.

Captain Luymes (Netherlands) remarked that the results obtained by the harmonic constants method for the prediction of tides on the Dutch coast were not as satisfactory as those obtained by the old method. Meanwhile investigation was being carried on and it was to be hoped that eventually an improvement in the harmonic constants method would allow it to be adopted.

Commander Warburg (Great Britain) said that the situation was the same in his country. He hoped, nevertheless, that the harmonic constants method would be adopted little by little.

Professor Tenani (Italy) observed that the harmonic constants method had not been used in Italy until quite recently, when they had been obliged to consider it for the Indian Ocean where no standard ports existed.

The **Chairman** thought that the Committee might adopt a proposal somewhat as follows:|

"The Committee considers that it would be of great advantage to familiarize seamen as much as possible with the use of the harmonic method and it leaves to each State the choice of the method which may seem the most practicable to it".

This proposal was unanimously adopted.

THE PUBLICATION BY THE BUREAU OF A VOLUME OF HARMONIC CONSTANTS.

Commander Warburg (Great Britain) said that there had been some misunderstanding on this question. The International Hydrographic Bureau had requested all countries to supply the harmonic constants which they calculated. In Great Britain, this led to the idea that the Bureau intended to publish a complete volume of harmonic constants for the world and he had consequently undertaken the collection of those for the British Empire. This entailed much correspondence and a great deal of work, for in some places as many as thirty separate years' constants had been computed and required averaging. Later on, he had learnt from a fresh communication from the Bureau, that a Tidal Manual giving only the principal constants was meant. The intention was, therefore, not to publish a complete volume of harmonic constants, but to give only a few of the most important in a Tidal Manual. Under these conditions, the work had been suspended. It would, however, be

extremely useful to have a volume containing the harmonic constants for all countries of the world. The International Hydrographic Bureau might perhaps undertake this publication.

The **Chairman** quite agreed and read out the following resolution:

"The Committee on Tides recommends the publication by the International Hydrographic Bureau of a volume containing harmonic constants for the whole world.

"This basic volume should be kept up to date by the issue of a periodical supplement (Annually).

"The definite arrangement of this publication shall be determined by the International Hydrographic Bureau as soon as possible, after obtaining authoritative opinions from the Offices interested".

Thus the work of Commander Warburg could be utilised.

This resolution was unanimously adopted.

THE USE OF AN INTERNATIONAL LOW WATER DATUM FOR CHARTS AND TIDE TABLES.

Captain Luymes (Netherlands) thought it was impossible to fix a general datum for international low water. He explained that in Holland, the datum had been fixed on the basis of six years of observations. In the colonies, where long series of observations were generally not available, one had to be content with calculating the harmonic constituents from observations made during a month or two and with fixing the tidal datum on a theoretical basis, taking these constituents into account.

In his opinion a more or less arbitrary definition would inevitably have to be adopted. He thought that the London rule adopted in 1919 was the best, provided however that the words "but seldom" were substituted for "not frequently".

Commander Warburg (Great Britain) saw no use in this substitution of words, which both seemed to him capable of varying interpretation according to circumstances.

The **Chairman** preferred the expression "but seldom" which seemed to him more precise. Generally speaking, he considered the London definition thus modified, as quite excellent.

Captain Luymes (Netherlands) explained that in his country when a new tidal datum was being chosen for charts, the mean plane of low water springs situated for Flushing, 225 centimetres below the plane of Amsterdam had not been taken because this datum gave too many negative corrections and also too large ones. Thus a plane had been adopted for Flushing situated 250 centimetres below the plane of Amsterdam, which was the mean plane of the lowest low waters of spring tides of each month. The use of this plane of 250 centimetres for Flushing only gave rise to 4 % of negative corrections. Out of this number, 1 % exceeded one decimetre and none of the corrections exceeded 3 decimetres except in very exceptional cases such as where the low water datum was lowered by strong meteorological disturbances. For instance, at Flushing a datum of 313 centimetres below Amsterdam datum had been observed. So low a situation was however very rare.

The **Chairman** thought that the London definition could be applied to all countries of the world. In France, for example, the zero chosen was such that, as far as could be foreseen, the sea would never descend below it. Sailors were therefore always certain of having at least as much water as was shown on the chart.

Dr. Rauschelbach (Germany) agreed with Captain Luymes about fixing the datum by direct observations.

The **Chairman** put the London resolution to the vote with Captain Luymes' amendment.

This amendment was unanimously adopted.

The **Chairman** opened the discussion on the datum to adopt, and the method of its calculation.

Commander Warburg (Great Britain) said that after studying the matter, he had come to the conclusion that the calculation of the datum of international low water by means of harmonic constants would not be impossible, but that this would entail the use of an extremely complicated formula. He thought it therefore preferable to calculate this datum by means of observations.

The **Chairman** considered that Commander Warburg's conclusions were in fact quite correct. Personally, however, he would prefer to calculate on the basis of the harmonic constants.

When making a hydrographic survey, he said, the time available was not always sufficient to obtain a precise determination of these constants; but it may be said also that the low waters obtained during this short period might be quite different from those which might appear later. On the other hand, harmonic constants were obtained by observations. Thus, to have a given number of waves, a long period of observations is needed which might even exceed one year. Once these constants were obtained, it seemed that the method of calculation of international low water would be more accurate and less subject to divers interpretations than that which depends exclusively on direct observations.

If observations were carried out during a year of mean lunar declination, the result obtained would be precise; if on the contrary these observations were made at a time when the lunar declination was well distant from the mean, they would have no practical utility. On the contrary, in using the method based on harmonic constants, the results would be always the same, since the investigations would be based on theoretical data. Harmonic constants were applicable every year, on condition, however, that a certain number of factors referring to astronomical elements were taken into account. It was possible to select these factors, so that they would correspond with the year of lunar declination referred to. The curve of this theoretical year could then be traced and zero deduced, and this operation can be carried out without waiting until the low waters which might be required were supplied by observation. Further, the calculations for a given port might be made anywhere; the results would be the same because constants would be used to which the same value would be attributed. This is, at least, a theoretical advantage.

Commander Warburg (Great Britain) said that if it could be assumed that harmonic predictions were correct, then to compute a datum from a predicted curve was the same thing as computing from observations.

The **Chairman** agreed but remarked that with this method it was not necessary to await a year of mean lunar declination.

Captain Luymes (Netherlands) used to think that direct observations had to be taken whenever possible. He had nevertheless recently changed his mind. He recalled that the figure adopted for Flushing, at the end of the observations, was 250 centimetres below the datum of Amsterdam, whereas the figure resulting from calculation by harmonic constants was 235 centimetres, (See Special Publication No. 10 of the I. H. B.: "*International Low Water*"). The difference was therefore 15 centimetres, a very important difference, because the theoretical datum had been deduced with the greatest exactitude, taking into consideration the shallow water and compound tides. Investigation had proved that such a difference could not be attributed to meteorological influences and should be caused partly by the discrepancy between the

mean range determined from tidal constituents and as observed, as referred to in the "*Manual of Tides*" by Harris, which was estimated to 5 centimetres.

The difference between the two methods was therefore reduced to only 10 centimetres.

The speaker said that researches were at present being made in Holland concerning the tides of the Northern portion of the Zuiderzee, which tides would undergo certain changes owing to the future construction of a dyke. Professor Lorentz had been contemplating a method for calculating these tides thus modified. In the publication concerned, another method would also be given for a better calculation of the tide curves on the basis of harmonic constants. The speaker said he could not comment on it at present, because he did not know it sufficiently well himself yet. He could simply say that, through this method, 247 centimetres were obtained as the tidal datum for Flushing, by theoretical calculation, *i. e.* 3 centimetres less than by the direct observation method. It was therefore permissible to assume that, in future, harmonic constants would be more and more used for determining tidal datums.

Commander Warburg (Great Britain) pointed out that, at the present time, the harmonic constants method was not yet absolutely exact, for the problem of tides in shallow water, though it had been carefully studied, was not yet fully understood.

The Chairman acknowledged that the harmonic analysis applied only for great depths; when risings of the bottom occurred, compound tides should be taken into consideration and in such a case, only direct observations could be acted upon.

In conclusion, he considered it rather premature at present to include harmonic constants exclusively in the definition. They should content themselves with a very general definition, such as had been adopted.

The discussion on this point concluded, the Chairman opened the debate on

ENGLISH TRANSLATION OF ARRANGEMENT OF TIDE TABLES.

The Chairman pointed out that this question had been discussed in the presence of the Japanese Delegate, who had been good enough to say that the Japanese Government had already begun to make translations into English. As this proposal principally concerned the Japanese language, it seemed to him that the members of the Committee should declare themselves satisfied.

Commander Warburg (Great Britain) recalled that it had been a question of deciding whether the information should be translated into English or into French, or into English only.

The Chairman proposed to the Committee the following draft resolution: "The Committee recommends, principally for Tide Tables which are not published in Roman characters, that summary indications, in English or in French for example, should appear in the headings of divisions or of columns, so as to render the use of such publications more international".

This draft resolution was unanimously adopted.

DATUM FOR REDUCTION OF SOUNDINGS.

Commander Warburg (Great Britain) remarked that Japan had proposed as follows:

"that the universal datum for reduction of soundings should be Indian Spring Low Water".

The Chairman said that the Japanese Delegate did not insist on this proposal, so the question was settled.

CLOSURE OF COMMITTEE WORK.

The **Chairman** remarked that the Committee had examined all the proposals which had been submitted to it. He asked whether any Member wished to bring up any new point.

Professor Tenani (Italy) thought it would be useful to recommend to the different countries who would use the harmonic constant method that they should give the period over which the observations had extended, which had been used as a basis for the calculation of these constants.

The **Chairman** agreed and proposed adding to the draft resolution already adopted the following sentence :

" Very complete information as to the number and duration of the observations together with the unit of measurement employed should be supplied ".

Captain Luymes (Netherlands) thought it would be preferable to suppress the words " together with the unit of measurement employed " ; otherwise, too many details would have to be given.

This text, with Captain Luymes' amendment, was unanimously adopted.

The **Chairman** thanked his colleagues for the courtesy they always showed in the course of the debate and for the rapidity with which they had carried out their work.

Captain Luymes (Netherlands) congratulated the Chairman on the competence with which he had presided over the work of the Committee. (*Applause*)

The **Chairman** said that the report on the work of the Committee would be submitted for the approval of its Members at a sitting which would take place on the morrow at 0850, immediately before the Plenary Session.

The Meeting closed at 1100.

REPORT OF THE TIDES COMMITTEE.

The Tides Committee met at the International Hydrographic Bureau on the 4th and 8th November 1926 in order to examine the various questions placed upon the Agenda (contained under Heading VI - Tides) as also questions I-14 and II-3 concerning Tides remitted to it by the Committee on Charts and Sailing Directions.

After having read over all the information brought before the Committee, various reports on Tides and their detailed analysis contained in the publications of the International Hydrographic Bureau, as also the complementary reports and observations presented and made by the Delegation of the United States of America (*Appendix A*) and by the Japanese Delegation, (*Appendix B*) the Committee proceeded to an exchange of views upon each subject in particular and unanimously passed the following resolutions:

RESOLUTIONS PROPOSED

by

the COMMITTEE ON TIDES.

INFORMATION CONCERNING TIDES WHICH SHOULD BE INSERTED ON CHARTS (I-14).

In the present condition of practical studies of the Tides, the Committee confines itself:

"to recommend a more general use by mariners of methods of prediction based on the use of harmonic constants: information relative to Tides which is to be shown on charts is left to the discretion of the various Hydrographic Offices whether or not they issue Tide Tables".

(*Adopted*).

INFORMATIONS CONCERNING TIDES WHICH SHOULD APPEAR IN SAILING DIRECTIONS. (II-3).

Given the special difficulties still encountered in practice for a perfectly clear classification of the various groups of Tides, the Committee:

"considers that it would be better for the present, to leave to States and Hydrographic Offices complete latitude in the drawing up of their *Sailing Directions* in so far as concerns Tides according to their usual custom and in the manner best suited to the practice of the mariners of their own nation".

(*Adopted*).

USE BY THE MARINER OF HARMONIC CONSTANTS FOR THE PREDICTION OF TIDES AND METHOD OF PREDICTION (VI-1A).

The Committee expresses the desire to see the mariner more familiar with the use of Harmonic Constants for the prediction of Tides in practice; it is left to each Service or to each mariner using Harmonic Constants to choose the method which appears most practicable.

(*Adopted*).

*PUBLICATION BY THE INTERNATIONAL HYDROGRAPHIC BUREAU
OF A VOLUME CONTAINING THE HARMONIC CONSTANTS (VI-1b).*

The Committee recommends :

" the publication by the International Hydrographic Bureau of a volume containing standard harmonic constants for the whole world.

" This basic volume should be kept up to date by the issue of a periodical supplement (annually).

" The definite arrangement of this publication shall be determined by the I. H. B. as soon as possible after obtaining authoritative opinions from the Offices interested.

" All detailed information as to observations and the period during which they were made should be provided".

The I. H. B. shall make every effort to procure from the Administrations interested the Constants for those places which it lacks.

(Adopted).

*ESTABLISHMENT OF AN INTERNATIONAL LOWER WATER DATUM
FOR MARINE CHARTS AND TIDE TABLES (VI-1c).*

After an exchange of opinion upon the necessity of establishing such a datum in the neighbourhood of the lowest Low Water of the year, so that the Tide only rarely descends below the level chosen, and upon the manner in which such a datum could be deduced from the observations themselves or from the Harmonic Constants which emerge from such observations, the Committee considers that, in the actual condition of the study and analysis of Tides, too strict a formula of calculations is not possible and that it would appear necessary to consider as sufficient the following general definition of the datum :

" Tidal datum should be the same as Chart Datum, and should be a plane so low that the tide will but seldom fall below it".

(Adopted).

Moreover, the Committee expresses the desire :

" that it is necessary to show clearly on charts and in Tide Tables, a reference to mean sea level from this datum for soundings".

(Adopted).

*TRANSLATION INTO ENGLISH OR FRENCH OF HEADINGS, etc. OF
TIDE TABLES (VI-2).*

The Committee recommends, principally for Tide Tables which are not published in Roman characters :

" That summary indications, in English or in French for example, should appear in the Headings of Divisions or of columns so as to render the use of such publications more international".

(Adopted).

(APPENDIX A.)

MEMORANDUM
from
COAST AND GEODETIC SURVEY, WASHINGTON, D. C.
on the subject of
TIDES, and PROPOSALS IN RELATION TO TIDES.

Proposal by Great Britain (Page 53) :

(a) **The use of Harmonic Constants by Seamen or Predicting the Tides of Ports which are not Standard Ports.**

The harmonic method of predicting Tides, that is, the method which makes use of the harmonic constants, is used exclusively by the U. S. Coast and Geodetic Survey in the predictions for the principal ports given in the tide tables published by this Bureau. For several thousand subordinate ports the predicted times and heights of the tides can be obtained by simply applying certain tide differences to the predictions given for the principal ports. In cases where the type of tide is similar, very excellent results can be obtained by this method. While it is admitted that the harmonic method might give better results for subordinate stations, because of the labour involved it would be physically impossible to extend this system to the several thousand subordinate stations now listed in our tide tables, even if harmonic constants were available for these stations.

The harmonic method is somewhat involved, but the laborious part of the work is largely eliminated in the office by using the tide predicting machine. Because of the labour involved in the harmonic method when no machine is available it is very doubtful whether there would be any advantage in trying to teach the seamen how to use this method. The fact that for most places along the coast the seamen can easily obtain approximate predictions by simply applying the tidal differences listed in the tide tables to the predictions for the principal ports to which the stations are referred, renders it very unlikely that they would take the time and trouble necessary to make the predictions by use of harmonic constants.

It is true there may be some places where the type of tide differs from that at any of the principal ports now given in the tide tables, but as information pertaining to such places becomes available, arrangements can be made to include in the tide tables additional principal ports to which these stations can be referred.

(b) **The Publication by the Bureau of a Volume of Harmonic Constants.**

The publication by the International Hydrographic Bureau of a volume of harmonic constants with supplements and revisions from time to time as additional data become available, is highly recommended by the U. S. Coast & Geodetic Survey. Such a volume would furnish the necessary data for the harmonic prediction of tides by the various maritime nations now using this method in the preparation of their tide tables and would also provide the geophysicist with indispensable data for a satisfactory study of the tidal phenomena throughout the world.

The two most comprehensive lists of such constants already published are contained in Special Publication No 98 of the U. S. Coast & Geodetic Survey and Special Publication No 12 of the International Hydrographic Bureau. In the U. S. Coast & Geodetic Survey publication there are listed practically all the harmonic constants available for 840 ports, the following 37 different components being represented :

J, K₁, K₂, L, M₁, M₂, M₃, M₄, M₆, M₈, N, 2N, O, OO.

P, Q, 2Q, R, S₁, S₂, S₄, S₆, T, λ μ υ

"P", MK, 2MK, MN, MS, 2SM, M_f, M_{sf}, M_m, S_a, S_{sa}.

In the International Hydrographic Bureau Publication there are listed approximately, 1,400 ports but only 10 components are represented, namely :

S₂, M₂, K₁, O₁, N₂, K₂, P₂, M₄, M_S, 2M_S,

the last being the same as component *M₄* in the other publication.

If the International Hydrographic Bureau undertakes the publication of a standard volume of harmonic tidal constants it should contain all constants available. In regard to the unit to be used for the amplitudes of the components it is reasonable to assume that nations now using the foot for their tidal predictions would prefer the same unit for the component amplitudes and that nations now using the metric system would prefer the same system in the suggested publication. Perhaps it would be practicable to give the amplitudes in both units thereby meeting the convenience of all concerned. In regard to the meaning attached to the epoch or kappa constants it is understood that the general practice in the past has been to follow the system used by Sir George H. Darwin in which epochs are referred to certain astronomical conditions pertaining to the local longitude. This system might be continued with advantage. There is, however, much to be said in favour of referring all epochs to astronomical conditions pertaining to the Meridian of Greenwich.

(c) The use of an International Low Water Datum for Charts and Tide Tables.

For the datum of charts and tide tables, for the Atlantic Coast of the United States, where the diurnal inequality is small, the U. S. Coast & Geodetic Survey uses the datum of mean low water which is the mean of all low waters. For the Pacific Coasts of the United States where there is often a considerable difference between the height of two consecutive low waters, the mean of the lower of the two low waters for each day is used and designated as mean lower low water. As these two datums have met with general satisfaction and as the work of changing all the charts already published to a new datum would be considerable, this Bureau does not feel disposed at the present time to make any change in the datum.

Perhaps instead of a single international low water datum the adoption of international low water datums would be of advantage. As Admiral Phaff points out a datum desirable for semi-diurnal tides is not desirable for mixed tides. In every case, however, it appears desirable to base the datum on observed low waters rather than on harmonic constants.

(d) Tidal Datum should be the same as Chart Datum, etc...

The U. S. Coast & Geodetic Survey concurs in the suggestion that the datum for tidal predictions should be the same as chart datum, this being in accord with the general practice of this Bureau. It is believed, however, that to define or determine the datum in a manner which would limit the number of times the water would fall below the datum during any given period, in-

volves numerous difficulties. It appears that a more natural datum based directly on the observed low waters can be derived which will possess all the advantages of that proposed. In every case, however, the relation of the datum used to mean sea level should be definitely stated, since this will allow various datums to be correlated.

PROPOSALS BY THE INTERNATIONAL HYDROGRAPHIC BUREAU.

(Page 106).

1. That Tidal Datum should be the Same as Chart Datum.

This Bureau is in accord with the suggestion that the same datum should be used for tides and charts, this being in conformity with the present practice of this Bureau. For the Atlantic Coast of the United States the mean of all low waters is now used as the datum, and for the Pacific Coast the mean of the lower of the two low waters of each day, the difference in the datums on the two coasts being due to the fact that the diurnal inequality is small on the Atlantic Coast and large on the Pacific Coast. Although during portions of each month the tides may frequently fall below these datums, they have proven to be of general satisfaction and because of the great amount of work that would be involved in changing the many charts already published, this Bureau does not feel disposed to make any change in the datum at the present time. Further discussion of the subject appears highly desirable before any definite action is taken.

2. Use of Harmonic Constants in determining Tidal Datum.

In view of the fact that the harmonic analysis of tides is a specialized and a somewhat laborious process, and that harmonic constants are generally not available when making new hydrographic surveys and that quite frequently the datum for the reduction of the survey must be derived from a very short series of observations, it is believed best to rely entirely upon the high and low waters for the definition and determination of the tidal datum.

3. Tidal Information on Charts.

While a limited amount of tidal data is now given on the charts published by the U. S. Coast & Geodetic Survey, it is believed that the same information could be obtained just as easily from the tide tables and sailing directions. There is the additional advantage pertaining to the data as published in the annual tide table due to the fact that revised data from later observations can be included in the tide tables at more frequent intervals than on the charts which may remain unrevised for a number of years. It is urged, however, that the relation of the chart datum to mean sea level be given on every chart and this will permit the correlation of the depths shown on charts using different datums.

(I-14) Tidal Information to be given on Charts.

This Bureau does not concur but refers to its remarks under the heading of *Tides* and in particular to paragraph 3 *Tidal Information on Charts* under sub-heading *Proposals by the International Hydrographic Bureau*.

.....

(II-3) Tidal Information to be given in Sailing Directions.

This Bureau does not concur. (See Comments by this Bureau under the Heading of *Tides*).

(APPENDIX B.)

MEMORANDUM
PRESENTED BY THE JAPANESE DELEGATION ON THE QUESTION
OF TIDES.

The Japanese Delegation submits to the Conference its opinions on various proposals and comments contained in the document entitled "Proposals made by the States Members and by the Directing Committee of the Bureau to be submitted for discussion at the International Hydrographic Conference of 1926", pages 53 to 107 inclusive.

British Proposal. (Page 53).

(a) The use of Harmonic Constants by Seamen or Predicting the Tides of Ports which are not Standard Ports.

1). Agreed.

2) & 3). Agreed with the opinion of the Bureau (pages 94-95). The Japanese Delegation supports proposal (a) in principle, but it appears to be by no means easy for navigators to predict tides by means of harmonic constants. Therefore, the propagation of the method of predicting tides by means of harmonic constants is earnestly to be desired, and it is hoped that the Authorities publishing Tide Tables will make great efforts to improve their Tide Tables so as to enable navigators to get fairly accurate predictions of tides by applying the tidal differences to the prediction for the standard port.

(b) The Publication by the Bureau of a Volume of Harmonic Constants.

1). Agreed. The Japanese Delegation is grateful to the Bureau for having published its Special Publication N° 12, in furtherance of this proposal.

2) & 3). Agreed with the opinion of the Bureau (p. 96).

(c) The use of an International Low Water Datum for Charts and Tide Tables.

1). It is greatly to be desired that a uniform rule for determining the datum plane be adopted by all nations.

2). It is very important to define distinctly the level to be adopted, and the method of calculating it.

(d) Tidal Datum should be the same as Chart Datum, etc...

The Japanese Delegation supports the first part of this proposal, but cannot agree with the second part. For the determination of the proposed datum, it is necessary to make observations of tides for one year, in a year of average lunar declination (once in about 9 years). This is practicable only for a certain number of ports, but not for coasts in general.

Comment of the Bureau on the Proposal of Great Britain. (Pp. 94-102).

- (a)
2) & 3). The Japanese Delegation is of the same opinion as the Bureau.

Comment of the Bureau on the Proposal of Japan. (Pp. 102-104),

(2) It is only meant that harmonic constants can be deduced from tidal observations extending over 15 days. In practice, they should be deduced from observations extending over as long a period as possible. It is true that observations should extend over several decades in order to get a trustworthy mean sea level. But, for establishing a preliminary datum, the Japanese Delegation strongly supports the argument that the datum must be such as could be determined from observations extending over a few months.

From a practical point of view, the Japanese Delegation considers that the change of yearly mean sea level need not be taken into consideration, but that only the change of mean sea level from month to month should be taken into account.

(3) It is true that the formulae are exactly correct only for tides which are perfectly regular, purely diurnal, or purely semi-diurnal, but they are approximately correct for all cases except for the tide of predominant quarter-diurnal tides, which is rather rare.

(5) The difference of opinion arises from a difference in the conception of the word "short period", the Bureau considering it to be "several years", while it is understood in the Japanese proposal to be "a few months".

(6) *Sa* may be neglected, but *Ssa* must not be neglected.

(9) The Japanese Delegation admits that the Japanese proposal was faulty in arbitrarily lowering the datum. But the Japanese proposal does not entail that the term "international low water" should be dropped.

Conclusions by the Bureau on the British and Japanese Proposals (pp. 104-106).

The Japanese Delegation supports the principle that the tide will but frequently (but seldom) fall below datum. The method actually adopted by the Japanese Hydrographic Authority is in accordance with this principle.

Proposal of the Bureau. (P. 106).

1. That Tidal Datum should be the Same as Chart Datum.
2. Use of Harmonic Constants in determining Tidal Datum.

The Japanese Delegation agrees with the first paragraph of this proposal. As to the second, it would be highly desirable to obtain a method of deducing tidal datum correctly and easily from harmonic constants as well as from observations. As to the recommendation of the Bureau which is found in the following paragraphs, the Japanese Delegation cannot agree to it. Though this is a modification of the proposal made by Admiral Phaff in Special Publication No. 5 of I. H. B., the values deduced from harmonic constants and from tidal observations do not give an equal result for tides 1, 2 and 3, for nearly the same reason as pointed out in the explanation of the Japanese proposals. Moreover, the term "approximately" is used for tides 1 and 2 in the Bureau's definition. The definition of any method of determining such datum must be given in exact terms, whatever be the magnitude of error found in determining it from actual observations.

Second Proposal of the Bureau. (Pp. 106-107).

Tidal Information to be given on Charts, and in Sailing Directions.

Though information as to tides now given on charts is very incomplete, it is better than no information at all. The Japanese Delegation cannot agree to the deletion of tidal information from charts.

It is tedious work to give, in Sailing Directions, the tidal information based on harmonic constants for each port. The number of ports for which such information can be given may be very small, and for the majority of ports there is no way of giving information other than, or similar to, that now given in Sailing Directions.

Note. — In the Sailing Directions published by the Japanese Hydrographic Department, the tidal information is given for some standard ports with curves attached showing the tides at different stages. General information as to tides on the coasts is given in reference to a standard port, but not for each port.

It is very desirable to insert in the tide tables, besides predictions and data as to mean sea level, tidal constants (harmonic or non-harmonic) as well as tidal differences referred to the standard port.

Note. — As to the description of tides for places where the diurnal inequalities are very conspicuous, the International Hydrographic Conference in London 1919 passed the resolution (Section 6 *d* (b)) that it should be further considered by the authorities in each nation. Where the diurnal inequalities of tides are so great that there is very often only one high water and one low water in a day, the Japanese charts and tide tables give the following constants for tropical tides together with the constants for equinoctial tides.

1°) Mean high water (higher high water) interval ;

2°) Mean low water (lower low water) interval.

Both to be added to the moon's upper (lower) transit time when the declination is *N.* (*S.*).

3°) Mean height of high waters (higher high waters) above datum.

4°) Mean height of low waters (lower low waters) above datum.

As to the publication of a list of harmonic constants, the Japanese Delegation agrees to this proposal in principle, but the appending of a list of harmonic constants to Sailing Directions will not be carried out by the Japanese Authority until navigators have become familiar with harmonic constants.

PART III.

F.

MEETING OF COMMITTEE ON ELIGIBILITY OF CANDIDATES.

LIST OF THE MEMBERS OF COMMITTEE :

Bayram, Mahmoud Bey	-	-	-	-	-	Egypt.
Gallépe, Monsieur	-	-	-	-	-	Monaco.
Herrero y Garcia, Captain.	-	-	-	-	-	Spain.
Ravn H. O., Captain	-	-	-	-	-	Denmark.
Shao Chung, Commander	-	-	-	-	-	China.

The report of this Committee was adopted by the Conference (*see* page 153).

REPORT OF THE ELIGIBILITY COMMITTEE.

The Committee appointed to examine whether the candidates who offer themselves for the posts of Directors and Secretary-General of the International Hydrographic Bureau fulfil the conditions required by the Statutes, met on 5th November 1926, and, after examination of all information given by the Secretary-General of the Conference, expressed the following opinion :

1). Date of Declaration of Candidature.

The Committee has ascertained that the declarations of all the Candidates arrived at the International Hydrographic Bureau within the limit of time prescribed by Article 59 (1) of the Statutes, except in so far as Admiral Hosemann is concerned. Admiral Hosemann's candidature had already been accepted by the Conference, in Plenary Session on 3rd November.

2). Qualifications of the Candidates.

The Committee, after having examined the Statement of Service of each Candidate, is of opinion that all fulfil the conditions required by Article 22 of the Statutes.

PART. IV.

REPORTS DISTRIBUTED AND APPLIANCES EXHIBITED

The GERMAN DELEGATION presented to the Bureau :—

- a Report on the engraving and reproduction of Chart Plates,
- a proposed system of contour lines for Charts,
- a Report describing a towed sounding apparatus used in the Jade.
(A résumé of this description was given by the International Hydrographic Bureau in the *Hydrographic Review*, Vol. IV, N° 2, November 1927).

The ARGENTINE DELEGATION presented a memoir on the organisation of the Argentine Hydrographic Office (published in *Hydrographic Review*, Vol. IV, N° 2, November 1927).

The BRITISH DELEGATION presented a memorandum concerning the symbols for showing wrecks on charts and distributed the new Admiralty Tide Tables.

The SPANISH DELEGATION exhibited draft plans for the construction of an Oceanographical Institute at Malaga, showing a special wing offered for the occupation of the International Hydrographic Bureau.

The UNITED STATES DELEGATION presented a memorandum on the subjects discussed by the Conference.

The FRENCH DELEGATION, during the reception held in the Port of Monaco on board the French Surveying Vessels "Beautemps Beupré" and "Alidade" showed some appliances for sounding by echo (Marti and Langevin-Florisson systems). A demonstration of the working of these appliances was given.

Among the different hydrographic instruments and appliances shown on board the "Beautemps Beupré" the following were particularly noted :—

- a Jobin prism-astrolabe,
- a Repeating Circle of 180°, constructed by Rollet de l'Isle, Ingénieur Hydrographe Général.
- a theodolite with microscopes by Chasselon.
- a proposal relative to contour lines.
- notes by M. E. Fichot, Ingénieur Hydrographe Général, on the influence of terrestrial rotation on the aspect of Tides.
- The French Delegation presented a memorandum concerning original charts.

The JAPANESE DELEGATION sent to the Bureau for distribution several collections of the following documents :—

1. Bulletin of the Japanese Hydrographic Service for 1926 containing Magnetic Surveys.
2. A Catalogue of its Publications.
3. Bathymetric Charts of the seas in the environs of Japan.
4. Charts of the Hydrographic Survey of the Seismic Zone in 1923.
5. Sun Observations near the horizon.
6. New methods of calculation for astronomical navigation.
7. Photograph of a model constructed for the study of currents in the Strait of Tsugaru.
8. The depression of the horizon at sea.
9. The atmospheric pressure on the Ocean.
10. A memorandum referring to the subjects discussed by the Conference.

The PRINCIPALITY OF MONACO showed in the Oceanographical Museum different appliances for sounding, and others for the physical study of the sea, some of which were used in the expeditions of Prince Albert I of Monaco.

The NETHERLANDS DELEGATION circulated Notes concerning Range of Visibility of Lights.

The NORWEGIAN DELEGATION sent to the Bureau a description of a machine for engraving letters and symbols on Chart Plates.

The PORTUGUESE DELEGATION sent a collection of photographic views of the coast of Portugal.

The SWEDISH DELEGATION showed a small-scale model of a motor-launch for sounding purposes. The following are its principal characteristics:—

Motor Launch for Hydrographic Surveys — Length 10 metres — Breadth 2.3 metres — Draft 0.77 m. — Displacement 4 tons — Motor 16 to 18 H. P. Speed 8.4 knots.

The International Hydrographic Bureau showed a set of Tabulations of Buoyage and Signals and a set of Charts showing the progress made in hydrography on all the coasts of the world.

The Electric Submerged Log Co (London) gave, in the Port of Monaco, on board the "Primavera" several demonstrations of the working of the Cherni-keef Electric Submerged log.

CHRONOLOGICAL NOTES

25th OCTOBER 1926. (MONDAY) :

- 8.00. The French Surveying Vessel "*Beautemps-Beaupré*" with the tender "*Alidade*" arrived in the Port of Monaco.

26th OCTOBER 1926. (TUESDAY) :

- 10.30. Opening Meeting of the Conference in the Conference Hall at the Oceanographic Museum.
Prince Pierre of Monaco welcomed the Delegates and declared the Conference open.
- 14.30. Plenary Session.
Election of the President, Vice-President and Secretary-General of the Conference. |
- 17.00. Their Serene Highnesses the Hereditary Princess and Prince Pierre received the Delegates at the Palace. || | |

27th OCTOBER 1926. (WEDNESDAY) :

- 9.30. Plenary Session.
Discussion on the Work of the Conference and formation of Committees.
- 14.30. Reception to the Delegates on board the "*Beautemps-Beaupré*" and "*Alidade*". The recording Echo-Sounding apparatus was exhibited and explained.

28th OCTOBER 1926. (THURSDAY) :

- 9.30. Meetings of Committees.
Statutes Committee, in the Library of the Bureau.
Charts and Technical Documents Committee, in the Conference Hall.
Committee on Work of the Bureau, in the Conference Hall.
- 12.30. H. E. the Minister of State entertained the Delegates at lunch.
- 16.00. Meeting of the Statutes Committee.
- 20.45. Gala Performance at the Casino Theatre.

29th OCTOBER 1926. (FRIDAY) : | |

- 6.00. The French Surveying Vessel "*Beautemps-Beaupré*" and the tender "*Alidade*" left the Port. |
- 9.00. Meeting of the Chairmen of the Committees, in the Library.
- 9.30. Committee Meetings.
Committee on Work on the Bureau, in the Conference Hall.
Charts and Documents Committee, in the Conference Hall.
Statutes Committee, in the Library of the Bureau.
- 15.00. Committee Meetings.
Committee on Work of the Bureau, in the Committee Room of the Bureau.
Statutes Committee, in the Library of the Bureau.

30th OCTOBER 1926. (SATURDAY) :

- 9.30. Committee Meetings.
Charts and Documents Committee, in the Conference Hall.
Finance Committee, in the Conference Hall.
- 12.30. The Delegates were entertained at Lunch by the Mayor and Municipal Council of Monaco, at the Hôtel de Paris.
- 15.30. Meeting of the Statutes Committee in the Library of the Bureau.

31st OCTOBER 1926. (SUNDAY) :

- Automobile Excursion to the Gorges du Loup. Lunch at Grasse and visit to a perfume factory.

1st NOVEMBER 1926. (MONDAY) :

- All Saints Day. (Legal holiday).

2nd NOVEMBER 1926. (TUESDAY) :

- 9.00. Plenary Session.
- 10.30. Meeting of the Finance Committee in the Conference Hall.
- 14.30. Meeting of the Statutes Committee in the Library of the Bureau.

3rd NOVEMBER 1926. (WEDNESDAY) :

- 9.00. Committee Meetings.
 - Charts Committee, in the Conference Hall.
 - Finance Committee, in the Conference Hall.
- 15.30. Charts Committee, in the Conference Hall.
 - Statutes Committee, in the Library of the Bureau.
 - Some of the Delegates tested the Electric Submerged Log installed by the maker in a motorboat placed at their disposal during the remainder of the Conference.

4th NOVEMBER 1926. (THURSDAY) :

- 9.00. Committee Meetings.
 - Charts Committee, in the Conference Hall.
 - Tides Committee, in the Committee Room of the Bureau.
- 10.00. Eligibility Committee, in the Conference Hall.
- 14.30. Plenary Session.
- 16.30. Mr. & Mrs. Harrison Bennett entertained the Delegates and their families at Tea.

5th NOVEMBER 1926. (FRIDAY) :

- 9.00. Charts Committee, in the Conference Hall.
- 9.30. Statutes Committee, in the Library of the Bureau.
- 11.00. Eligibility Committee, in the Committee Room of the Bureau.
- 15.00. Charts Committee, in the Conference Hall.
 - Technical Documents Committee, in the Conference Hall.

6th NOVEMBER 1926. (SATURDAY) :

- 9.30. Plenary Session.
- 14.30. Plenary Session.
 - Election of new Directing Committee and of Secretary-General.
- 17.20. Statutes Committee, in the Conference Hall.

7th NOVEMBER 1926. (SUNDAY) :

- Automobile Excursion to St Raphael. Lunch at Valescure. Firework display organised by the Municipality in honour of the Delegates.

8th NOVEMBER 1926. (MONDAY) :

- 9.00. Charts Committee, in the Conference Hall.
 - Tides Committee, in the Committee Room of the Bureau.
 - Statutes Committee, in the Library of the Bureau.
- 14.15. Plenary Session.
 - Report of the Committee on "Work of the Bureau".

9th NOVEMBER 1926. (TUESDAY) :

- 9.15. Plenary Session.
 - Report of the Statutes Committee.
- 14.15. Plenary Session.
 - Report of the Finance Committee.
 - Report of Tides Committee.

10th NOVEMBER 1926. (WEDNESDAY) :

- 9.30. Plenary Session.
 - Miscellaneous Proposals.
 - Conference closed.
 - 16.30. "Thé Dansant" offered by the Delegates at the Hôtel de Paris in honour of the Monegasque Authorities, the Staff of the International Hydrographic Bureau and of those who had entertained the Delegates.
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